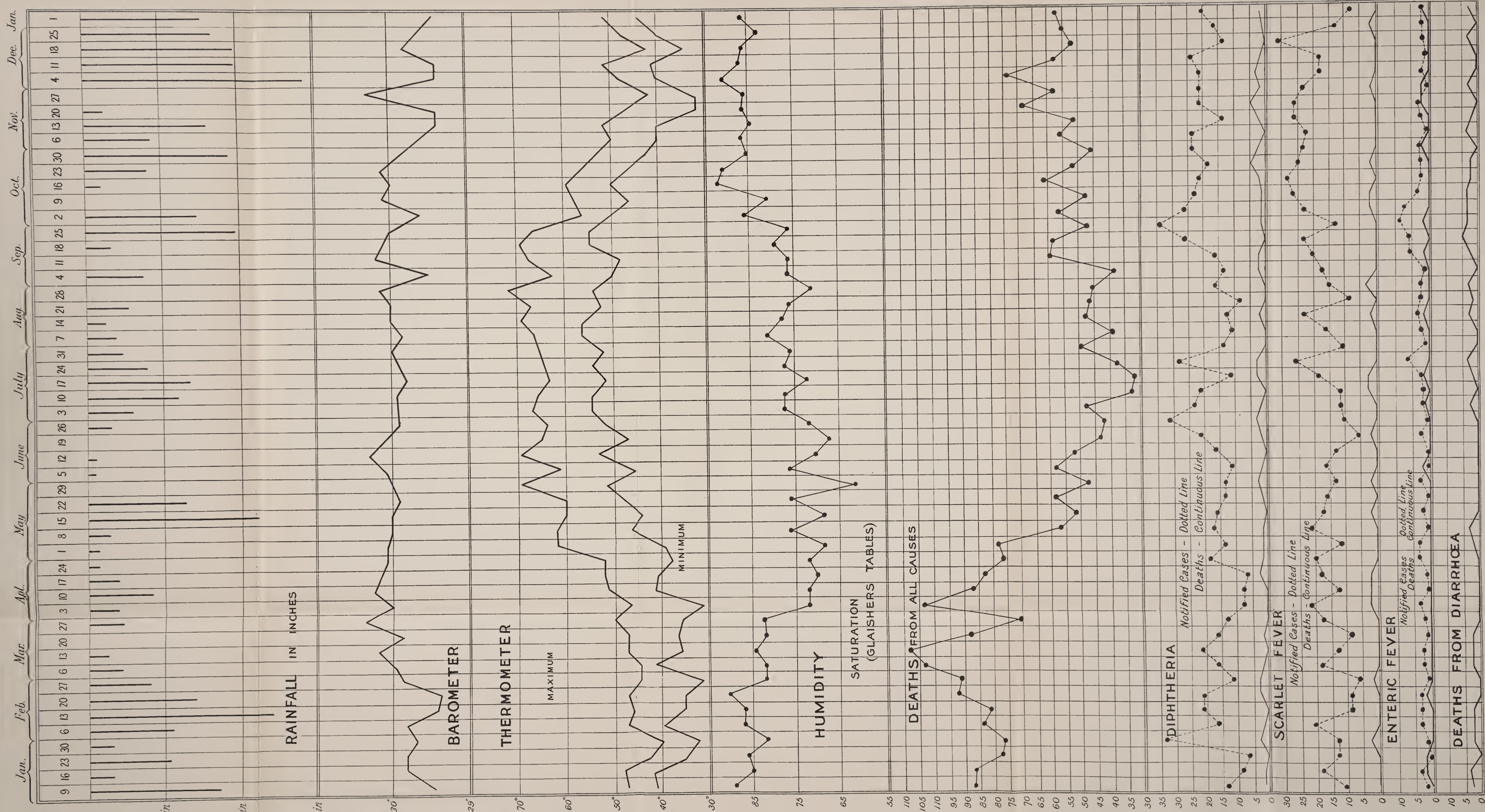







BOROUGH OF PORTSMOUTH.

METEOROLOGICAL & DISEASE CHART FOR THE YEAR 1915.





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“SALUS POPULI SUPREMA LEX.”



REPORT

ON

The Health of Portsmouth For the Year 1915

BY

A. MEARNES FRASER,

M.D. (EDIN. UNIV.), D.P.H. (CAMB. UNIV.)

Medical Officer of Health,
Medical Officer of Health to the Port of Portsmouth,
Medical Adviser to the Education Committee

INCLUDING

The Report of the
Medical Superintendent, Milton Hospital,
and the Public Analyst.



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Health Committee, 1914-15.

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Inspector under the Sale of Food and Drugs Act and

Inspector of Nuisances :

J. S. HOBBS, Cert. San. Inst.

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* Now serving with H.M. Forces.

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***JAMES FAIRLEY, M.D., D.P.H.**

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MISS E. HEALEY.

Langstone Hospital.

Sisters-in-Charge . . . MISS DUNCAN.
MISS BOOKER.

Infectious Diseases Hospital.

Medical Superintendent :

J. MCGREGOR, L.R.C.P., L.R.C.S.

Matron : MISS F. PETCHEY.

PUBLIC ANALYST : *R. P. PAGE, F.I.C.

DR. A. ANGELL (Acting Public Analyst)

* Now serving with H.M. Forces.

Medical Officer's Report, 1915.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

I have the honour to submit for your consideration my Annual Report on the Health of Portsmouth for the year 1915 ; this is the Twentieth Annual Report which I have prepared.

The work of the Health Department has been impaired to a certain extent owing to the War and to the depletion of my Staff by members of it who have joined the Services.

The most important new feature of the year has been the establishment of a Municipal Maternity and Child Welfare Centre, from which I anticipate a very beneficial effect on infant life.

Among many things that have had to stand over for the present has been a reconstruction scheme for the Voller Street area. Progress has, however, been made in the demolition of houses already condemned.

The enlargement of the Milton Infectious Diseases Hospital is well in hand, but various difficulties have prevented any progress being made with the new tuberculosis hospital at Langstone.

Considered generally the health of the Borough has been very satisfactory. Unfortunately, in common with most other places where troops were stationed, there was an outbreak of cerebro-spinal fever in the spring, to which 33 deaths were attributed.

I have the honour to be, Gentlemen,

Your obedient servant,

A. MEARNS FRASER, M.D.,

Medical Officer of Health.

Summary for 1915.

*Civil Population (estimated on National Register to middle of 1915) 202,441

*Total Population (estimated as usual on Census Returns to middle of 1915) 251,825

				Civil Population (202,441)		Total Population (251,825)		1914 Total Population (245,827)	
				Number	Rate per 1000 living	Number	Rate per 1000 living	Number	Rate per 1000 living
BIRTHS	..	..	..	4975	24.5	4975	19.7	5714	23.2
DEATHS	..	..	..	3284	16.2	3365	13.3	3194	12.85
„	Principal Zymotic								
	Diseases	..	..	314	1.55	321	1.27	273	1.11
„	Small-pox	..	..	—	—	—	—	—	—
„	Measles	..	..	123	0.60	125	0.49	39	0.15
„	Scarlet Fever	..	..	17	0.08	20	0.07	5	0.02
„	Diphtheria	..	..	68	0.33	68	0.27	79	0.32
„	Whooping Cough	..	..	36	0.17	36	0.14	50	0.20
„	Fever	..	..	18	0.08	20	0.07	29	0.12
„	Diarrhoea (under 2 years)			52	0.25	52	0.20	71	0.29
„	Pulm'y Tuberculosis	..	..	233	1.15	237	0.94	249	1.01
„	Cancer	..	..	238	1.18	239	0.94	197	0.80
„	Violence	..	..	113	0.55	135	0.53	135	0.54
				Infantile Mortality Rate				Infantile Mortality Rate	
„	Under 1 year, per								
	1000 births	..		433	87.0			455	84.8

DEATHS, 65 years and upwards	1016	Percentage to total deaths	..	30.9
„ Inquest Cases	315	„ „ „	..	9.59
„ In Public Institutions	812	„ „ „	..	24.72
„ from uncertified cause	20	„ „ „	..	0.60

DEATH-RATE for previous Ten years (1905-1914)	..	..	..	13.8
		1915		1914
Mean Temperature	..	51.1° F.	..	52.2° F.
Total Rainfall in Inches	..	37.41	..	33.13
„ „ „ Millimetres	..	950.2	..	841.5

* See Remarks on Statistics, p. 9-11.

Statistics.

The value of a Health Report upon a district depends to a very large extent upon the accuracy of the statistics upon which it is based, and the most important calculation is the number of persons living in the district, *i.e.*, the population.

The exact population of a district is only known at the census, which is taken once in every ten years. To arrive at the population for any period between the census years the following procedure is adopted. The rate of increase (or decrease) during the ten years between the last two censuses is ascertained, and it is assumed that since the last census the same rate has been maintained ; to ascertain, therefore, the population of Portsmouth for the middle of 1915, the population at the census in 1911 is ascertained, and to this is added $4\frac{1}{4}$ years' increase. (It is $4\frac{1}{4}$ years' increase, and not 4 years, because the population is always estimated to the end of the second quarter of the year, whereas the census is taken in the first quarter.) According to this, the usual method of calculation, the population of Portsmouth for 1915 would be 251,825, which includes men in the Navy and Army.

These, however, are not normal times, and the Registrar General, who issues the official estimates of the populations of the various districts in the country, is of opinion that there has been so much disturbance of population caused by the war, that the usual method of estimation is inapplicable. He has accordingly issued a Circular advising that for the purposes of the health statistics of 1915, no account be taken of sailors and soldiers, and that only the civil population be dealt with, and he has issued a return of the civil population of the various districts for 1915. These figures for the civil population are not calculated as usual from previous census returns, but are based upon the National Register, which was taken on Aug. 15th, 1915. The civil population of Portsmouth arrived at by this method is stated to be 202,441. It would be reasonable to expect that the figures thus arrived at, based as they are on direct enumeration, would be pretty correct ; I am of opinion, however, that for this Borough at least they are very far from being so. I believe the population given by the Registrar General is very much

below the actual population of the Borough. If this is so, and I shall give some of my chief reasons for this statement, the effect will be to throw up all death-rates, birth-rates, etc., much higher than they actually are ; in fact, the accuracy of any calculations based on the assumption that the civil population of the Borough is only 202,441 must be open to the gravest doubt. Still, as these figures are the official estimate I feel bound to adopt them in this Report.

My reasons for believing that the civil population of Portsmouth during 1915 are much higher than 202,441 are as follows :—

The total population of the Borough as ascertained at the census of 1911 was 231,141 ; deducting from this the number of sailors and soldiers (23,252), we find the civil population to have been 207,889. If the civil population had increased at the normal rate since the census, then in the middle of 1915 it would have been over 220,000, an increase of about 17,000. The Registrar General finds that so far from there having been an increase to this extent, there has actually been, in spite of $4\frac{1}{4}$ years growth of the town, a decrease in the civil population of 5,448. To anyone at all intimate with local conditions, such a state of affairs is quite incredible. It is true a certain number of the population has joined the Services, and some may have gone to other towns to work at munitions, but, on the other hand, there has been a considerable immigration into the town of workers at the Dockyard, of whom a large number have brought their families ; there has also been an immigration of the families of sailors and soldiers.

A still stronger argument is the following : In 1911 the number of inhabited houses was 47,033, in 1915 they numbered 49,071. It is difficult to believe that an increase of 2,038 inhabited houses can be coincident with a decrease of 5,448 persons in the population. Moreover, in spite of the increase of inhabited houses, never before in my experience has there been so much overcrowding in the Borough, and never have the working classes found so much difficulty in finding housing accommodation. Evidence of the difficulty experienced in finding accommodation was afforded by the appearance in the local press of a number of advertisements from persons offering premiums up to a sovereign for houses of a rental of about 7s. a week.

There are other reasons which could be brought forward in support of the view I take. The facts, however, which I have stated are sufficient to show that calculations made

on a basis of a civil population of only 202,441 must be open to question, and in studying the figures given in this Report it is important that this reservation should not be lost sight of, otherwise misleading inferences may be drawn.

Apart altogether from any error of calculation, the fact that the returns in this report only refer to the civilian population, and not to the whole population, both naval, military and civilian, as in former years, means that about 25,000 of the healthiest class, *i.e.*, men in the prime of life, have been extracted, and this must have the effect of rendering the death-rate for this year incomparable with that of former years.

Taking all factors into consideration I believe a more accurate representation of the health statistics of the Borough, and one which would be more correctly comparable with the returns for previous years, would be obtained by assuming that the whole population (including the naval and military elements) had continued to increase at the usual rate. This, as noted previously, would give us an estimated population for the middle of 1915 of 251,825. While not contending that this is as accurate an estimation as that for previous years (under the general disturbance caused by the war an accurate estimate is impossible), I believe that health statistics calculated on this basis would on the whole give a more correct representation of the facts than is secured by basing the calculations on an estimated civil population of 202,441. For this reason, although the latter will probably be taken as the official figures, I have in various tables included also the results obtained by taking the population as being 251,825. In these results the deaths of men in the Services occurring in the Borough are included.

Births. The total number of Births registered in the Borough during the year was 4,975. This was 749 fewer than in the previous year, and gives a birth-rate of 24.5 if calculated on the civil population, and 19.7 if calculated on the total population. The birth-rate for England and Wales was 21.8.

The total number of illegitimate births was 232. Some little time back some misguided persons were making wild statements as to the number of illegitimate births that would take place in this town, and calling for special provisions to be made for dealing with the babies. How ill-founded the anticipations were is shown by the fact, that not only has there been no increase in the number of illegitimate births

in the Borough, but the number registered has actually been the lowest recorded for the past five years.

In the different quarters of the year the births were registered as follows :—

First Quarter, ending	April 3rd	..	1499	births
Second	„ „	July 3rd	..	1225 „
Third	„ „	October 2nd	..	1004 „
Fourth	„ „	January 1st	..	1147 „

The total number of **Marriages** during the year was 2,978 ; the number last year was 2,106.

Deaths. The deaths registered amongst civil inhabitants belonging to the Borough numbered 3,284, 135 more than in the previous year, and gives a death-rate of 16.22 per 1,000 living, calculated on the estimated civil population. This is a higher death-rate than has been recorded since 1904, and exceeds the average of the last ten years by 2.38 per 1,000 living.

If however the death-rate is calculated on the estimated total population, including men in the Services, and of course deaths amongst these, it is found to be only 13.3 per 1,000 living, or slightly below the average of the last ten years. I think this method gives the more correct death-rate for the Borough.

The principal causes of death have been pulmonary tuberculosis 233 (244 in 1914), measles 123 (39 in 1914), cancer 238 (197 in 1914), valvular disease of the heart 339 (329 in 1914), bronchitis 308 (256 in 1914), pneumonia 248 (166 in 1914), premature birth and debility 128 (173 in 1914), and old age 292 (339 in 1914). The increase over last year in the number of deaths is accounted for principally by fatal cases of bronchitis and pneumonia, which numbered 556 against 422.

TABLE I.

Table showing the Population, Marriages, Inhabited Houses, Births and Deaths, for the year 1915, and the ten preceding years.

GROSS NUMBERS.

Year	*Estimated Population	No. of Inhabited Houses	Marriages	Registered Births	Total Number of Deaths		
					Total, all ages	Under 1 year	Under 5 years
1915	†202,441	49,071	2,978	4,975	3,284	433	813
1914	245,827	48,616	2,106	5,714	3,149	485	715
1913	241,256	48,280	2,025	5,989	3,044	462	786
1912	236,732	47,673	2,083	5,605	3,255	730	1013
1911	232,221	47,033	2,055	5,787	2,995	603	890
1910	227,821	46,457	1,917	5,801	3,045	556	862
1909	223,436	45,475	1,846	5,820	2,957	607	825
1908	219,095	44,734	1,930	6,110	3,332	714	1,089
1907	214,797	43,897	2,015	5,796	3,049	761	1,006
1906	210,546	43,036	2,005	5,870	3,345	755	1,179
1905	206,336	43,059	1,939	5,641	3,333	791	1,126
Average 10 years 1905-14	225,806	45,826	2,092	5,813	3,136	621	913

*Revised in accordance with Census Returns, 1911.

† Civil population only.

NOTES.

- 1.—Population at Census, 1911 :

(Males 115,160 ...)

) Females 115,981 ...)

231,141
- 2.—Area in Acres (land and inland water) ... 6,100
- 3.—Average number of Persons in each house at Census (1911) 4.9
- 4.—Average number of Persons per Acre at Census (1911) ... 38

TABLE II.

Showing Births and Deaths during the four quarters ending 1st January, 1916.

The Deaths registered include																		
Quarter	Births	Birth Rate	Deaths	Death Rate	Deaths of		Deaths from									Inquest Cases	Deaths in Public Institutions	Uncertified Causes of Deaths
					Infants under 1 year of age	Persons aged 65 years and upwards	Total Zymotic Diseases	Small-pox	Measles	Scarlet-fever	Diphtheria	Whooping Cough	Fever	Diarrhoea under 2 yrs.	Violence			
1st Quarter	1499	29.6	1127	22.2	159	366	112	—	62	2	15	20	3	10	22	95	221	4
2nd "	1225	24.2	811	16.2	111	212	96	—	57	5	16	9	2	7	26	71	194	6
3rd "	1104	21.6	590	11.6	77	184	57	—	4	6	14	5	7	21	38	72	180	4
4th "	1147	22.4	756	14.9	86	254	49	—	—	4	23	2	6	14	27	77	217	6
TOTAL	4975	24.5	3284	16.2	433	1016	314	—	123	17	63	36	18	52	113	315	812	20

TABLE III.

*Table showing the Annual Birth-rate, Rate of Mortality, and Death-rates among children for the year 1915, and ten preceding years.

Year	Birth-rate per 1000 of the Population	Annual Rate of Mortality living from all causes	Annual Rate of Mortality per 1000 living from 7 Principal Zymotic Diseases	Deaths of Children under 1 year : Percentage to total Deaths	Proportion of Deaths of Children under 1 year per 1000 Registered Births	Deaths of Children under 5 years : Percentage to total Deaths
†1915	24.47	16.22	1.55	13.1	87	24.5
1914	23.31	12.45	1.11	15.9	84	23.1
1913	24.44	12.23	1.15	18.0	90	25.7
1912	23.75	12.85	1.60	15.1	82	25.8
1911	24.99	14.06	2.01	22.4	126	31.1
1910	25.41	13.14	1.29	20.2	104	29.6
1909	26.40	13.62	1.35	18.2	96	28.3
1908	27.88	13.49	0.91	20.5	99	28.9
1907	26.93	15.51	1.77	21.4	123	32.6
1906	27.87	14.48	1.79	24.9	130	33.0
1905	27.34	16.21	2.58	22.5	134	35.2
Average of 10 years, 1905-14	25.83	13.80	1.55	19.9	106	29.3

* Revised in accordance with the Census Returns of 1911.
 † Civil population only.

TABLE IV.

Table IV., giving the populations, birth-rates, death-rates, etc., of the 20 largest towns, is omitted from this year's report, owing to the impossibility of obtaining reliable statistics as to population.

TABLE V.

Deaths Registered at several groups of ages from different classes of Diseases during the 52 weeks ending January 1st, 1916.

CAUSE OF DEATH	AGES											DISTRICTS						Totals	
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 60	60 to 65	65 to 75	75 to 85	85 and over	Portsmouth	Portsea	Landport North	Landport Central	Mid-Southsea		Southsea
TOTALS	433	373	174	111	204	219	320	202	232	491	414	111	71	226	901	954	809	323	3284
CLASS I.																			
General Diseases.																			
Enteric Fever	..	1	6	1	6	1	2	..	1	..	..	..	..	..	5	9	4	..	18
Measles	..	77	19	..	..	..	..	..	..	..	..	..	1	4	27	56	30	5	123
Scarlet Fever	..	9	5	1	1	..	..	..	..	..	..	..	..	2	6	5	4	..	17
Whooping Cough	..	23	1	..	..	1	..	..	..	..	..	..	..	1	14	14	5	2	36
Diphtheria	..	29	37	3	..	7	5	5	6	9	8	2	..	6	22	19	17	4	68
Influenza	..	1	4	..	..	..	..	..	..	1	..	..	..	1	15	8	15	12	51
Dysentery	1	..	..	..	1
Erysipelas	1	..	1	..	..	..	..	1	2	..	..	..	3
Pyæmia, Septicaemia	2	1	2	..	..	..	..	..	..	..	3	1	1	..	5
Tetanus	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Pulmonary Tuberculosis	..	3	11	41	73	36	40	15	7	4	3	..	..	27	58	66	58	21	233
Acute Phthisis	..	2	..	3	3	2	2	1	..	..	..	..	3	1	2	5	4	1	14
Tuberculous Meningitis	..	29	13	1	..	..	..	..	..	..	..	..	2	3	10	21	12	3	51
Tuberculosis of Peritoneum and Intestines, Tabes Mesenterica etc.	3	..	..	..	..	..	..	..	4	9	9	9	31
Tuberculosis of Spinal Column	..	1	1	..	1	..	..	..	..	..	..	..	..	..	2	1	..	..	3
Tuberculosis of Joints	..	1	1	..	..	1	..	..	..	..	..	..	..	1	..	1	1	..	3
Tuberculosis of other Organs	..	1	..	2	..	..	..	..	1	..	..	..	..	..	2	1	2	..	5
Disseminated Tuberculosis	..	2	..	5	..	3	..	1	1	..	..	..	..	1	4	4	4	..	13
Rickets and other forms of Bone Softening	1	1	..	..	2
Syphilis	..	1	..	1	1	1	4	1	..	..	..	..	2	2	4	2	2	2	14
Other Venereal Diseases	3	2	5	9	4	..	..	1	6	4	7	1	1
Cancer of the Buccal Cavity	4	16	7	13	24	13	2	..	5	22	22	24	6	80
" " stomach, liver, &c	1	..	..	..	..	..	..	..	..	4	..	..	..	..	23
" " peritoneum, in-	2	..	22	22	24	6	80
testines and rectum	1	5	7	4	8	16	3	..	..	..	13	15	14	2	44

[illegible]

TABLE V.—Continued

CAUSE OF DEATH	AGES										DISTRICTS					Totals			
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 60	60 to 65	65 to 75	75 to 85	85 and over	Ports- mouth	Portsea	Landport North		Landport Central	Mid- Southsea	Southsea
CLASS III																			
Diseases of the Circulatory System.																			
Pericarditis ..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	2	..
Acute Endocarditis ..	..	1	1	1	2	1	1	..	..	..	..	..	..	1	92	3	1	1	..
Valvular Disease ..	..	..	6	5	12	29	45	41	52	97	44	8	10	21	1	103	80	33	339
Angina Pectoris ..	..	..	..	..	..	..	..	2	..	..	1	..	..	..	1	1	1	..	3
Aneurysm ..	..	..	..	..	..	1	13	8	7	12	12	2	2	2	11	11	14	15	55
Cerebral Embolism and Thrombosis ..	..	..	..	..	..	..	2	2	5	3	2	..	..	..	3	7	4	..	14
Haemorrhage ..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	1
CLASS IV.																			
Diseases of the Respiratory System.																			
Diseases of the Larynx	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	3
Bronchitis ..	29	29	3	1	4	5	21	14	19	76	75	16	12	26	69	92	77	32	308
Bronchiectasis, Bronchial Catarrh, &c. ..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	1	2	1	4
Broncho-pneumonia	..	..	3	2	1	3	4	..	..	5	5	..	1	9	59	30	25	5	129
Lobar Pneumonia ..	18	22	8	3	5	8	16	12	6	14	7	..	2	5	39	28	35	10	119
Pleurisy ..	..	..	..	1	..	..	..	1	1	2	..	..	..	..	..	2	3	..	5
Pulmonary Congestion, &c.	..	..	..	1	..	1	1	..	..	1	..	..	..	..	..	2	4	..	6
Gangrene of the Lung	..	..	..	..	1	..	1	..	2	..	2	1	..	2	1	1	..	1	2
Asthma ..	..	..	1	..	2	..	2	..	..	2	..	..	..	..	1	4	3	2	12
Pulmonary Emphysema	..	..	..	..	..	..	..	..	..	2	..	..	..	..	1	..	1	..	2
Other Diseases of the Respiratory System	..	..	..	..	1	1	..	..	1	..	..	..	..	..	2	1	..	..	3

CLASS V.															
Diseases of the Digestive System.															
Diseases of the Teeth and Gums	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Diseases of Pharynx, Tonsillitis	2	..	..	..	..	..	..	..	..	..	..	..	..	..	4
Diseases of the Aesophagus ..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2
Perforating Ulcer of Stomach	..	..	..	5	..	..	..	..	..	..	..	..	..	1	15
Inflammation of Stomach ..	5	1	2	..	..	..	..	..	..	..	..	..	..	3	17
Diarrhoea and Enteritis	..	..	..	4	..	..	..	..	..	..	..	..	..	..	..
(under 2 years) ..	44	8	..	..	..	..	..	..	..	..	..	..	..	3	52
Diarrhoea and Enteritis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
(over 2 years) ..	..	1	3	1	1	1	2	..	..	..	..	..	..	..	17
Appendicitis ..	..	..	3	3	..	..	..	..	..	..	..	..	..	2	11
Hernia, Intestinal Obstruction	1	..	..	..	..	..	..	..	..	..	..	..	..	4	24
Other Diseases of the Intestines	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Cirrhosis of the Liver, &c. ..	..	..	..	..	..	7	4	1	..	..	..	..	..	2	20
Biliary Calculi ..	..	..	..	2	..	2	..	..	..	..	..	..	..	..	3
Other Diseases of the Liver ..	1	..	1	1	..	1	..	..	..	..	..	..	..	..	8
Peritonitis ..	..	2	..	..	..	..	..	..	..	..	..	..	..	1	4
Other Diseases of the Digestive System	..	..	..	1	..	..	1	..	..	..	..	..	..	..	2
CLASS VI.															
Non-Venereal Diseases of the Genito-urinary System and Annexa.															
Acute Nephritis ..	..	2	4	4	6	4	1	..	..	..	..	..	..	2	30
Bright's Disease ..	..	..	1	11	14	11	8	..	..	..	..	..	..	12	73
Other Diseases of the Kidney	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Diseases of the Bladder	..	..	..	..	..	..	3	..	..	..	..	..	..	4	8
Diseases of the Urethra, &c. ..	..	..	..	2	1	1	1	..	..	..	..	..	..	..	6
Diseases of the Prostate	..	..	..	..	5	1	2	..	..	..	..	..	..	3	9
Uterine Tumour ..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	4
Other Diseases of the Uterus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
Ovarian Cyst, Tumour	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2
Other Diseases of the Female Genital Organs ..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1

TABLE V.—Continued.

CAUSE OF DEATH	AGES												DISTRICTS						Totals
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 60	60 to 65	65 to 75	75 to 85	85 and over	Portsmouth	Portsea	Landport North	Landport Central	Mid-Southsea	Southsea	
CLASS VII. The Puerperal State, Accidents of Pregnancy Puerperal Haemorrhage Other Accidents of Childbirth Puerperal Fever .. Puerperal Albuminuria Puerperal Embolism	..	..	..	..	3	3	..	..	..	..	..	..	..	..	2	..	4	..	6
	..	..	..	..	2	..	..	..	..	..	..	..	..	1	..	..	..	1	2
	..	..	..	1	3	2	..	..	..	..	..	..	1	2	3	2	1	..	6
	..	..	..	..	4	2	..	..	..	..	..	..	..	..	2	2	1	..	6
	..	..	..	..	3	2	..	..	..	..	..	..	..	..	2	2	1	..	5
	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	1	..	1
	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
CLASS VIII. Diseases of the Skin and Cellular Tissue	..	..	..	..	..	..	..	..	..	..	2	..	..	..	1	1	..	..	2
Gangrene ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3
Phlegmon, Acute Abscess ..	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..	2	..	1	7
Diseases of the Integumentary System. ..	4	1	..	..	..	..	..	..	2	..	..	..	..	2	1	1	3	..	7
CLASS IX. Diseases of the Bones and of the Organs of Locomotion.	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	2
Diseases of the Bones	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	2
CLASS X. Malformations.	13	2	1	..	..	..	..	..	..	..	..	..	..	..	6	6	3	1	16
Congenital Malformations	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
CLASS XI. Diseases of Early Infancy.	127	1	..	..	..	..	..	..	..	..	..	..	2	10	37	42	30	7	128
Premature Birth, Infantile Debility, &c. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Diseases peculiar to early Infancy ..	7	..	..	..	..	..	..	..	..	..	..	..	..	1	2	3	1	..	7

[illegible]

CLASS XII.
Old Age.

Old Age, Senile Dementia,
Senile Decay ..

CLASS XIII.

**Affections produced by
External Causes.**

Suicide—Poison

Asphyxia

Hanging

Drowning

Firearms

Cutting o

Crushing ..

Acute Poisoning

Other acute poisoning

Conflagration

Burns ..

Suffocation

Drowning

Cutting

Fall

Crushing ..

Fractures ..

Summary

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CLASS XIV.

Ill-defined Causes.

Syncope, Heart Failure

Other Ill-defined Causes

SUMMARY OF TABLE V.

Class	DISEASES	Number of Deaths
I.	General Diseases	1012
II.	Diseases of the Nervous System and of the Organs of Special Sense	338
III.	Diseases of the Circulatory System	421
IV.	Diseases of the Respiratory System	593
V.	Diseases of the Digestive System	183
VI.	Non-venereal Diseases of the Genito-urinary System and Annexa	135
VII.	The Puerperal State	26
VIII.	Diseases of the Skin and Cellular Tissue	12
IX.	Diseases of the Bones and of the Organs of Locomotion	2
X.	Malformations	16
XI.	Diseases of Early Infancy	135
XII.	Old Age	292
XIII.	Affections produced by external causes	113
XIV.	Ill-defined Causes	6

TABLE VI.

Table showing the Numbers and Death-rates per 1000 of Population from the Seven Principal Zymotic Diseases, from Lung Diseases (excluding Phthisis), from Phthisis, and from all causes, during each Quarter and for the whole year 1915. (Civil population only.)

Quarter ending	The Seven Principal Zymotic Diseases* All ages		Lung Diseases (excepting Phthisis†)		Phthisis		From all Causes	
	No.	Rate per 1000	No.	Rate per 1000	No.	Rate per 1000	No.	Rate per 1000
1915								
April 4th ..	112	2.21	298	5.88	80	1.58	1127	22.2
July 4th ..	96	1.89	117	2.31	62	1.22	811	16.2
October 3rd ..	57	1.12	52	1.02	54	1.56	590	11.6
1916 January 1st ..	49	.96	126	2.44	51	1.07	756	14.9
Totals ..	314	1.55	593	2.92	247	1.22	3284	16.2

*Includes Small-pox, Measles, Scarlet Fever, Whooping Cough, Diphtheria, Enteric or Typhoid Fever, and Diarrhoea.

† Includes Laryngitis, Emphysema, Asthma, Bronchitis, Pneumonia, Pleurisy, and other Diseases of the Respiratory System.

TABLE VII.

Showing the number of Deaths in the Years 1861 to 1915,
from the Seven Principal Zymotic Diseases.

Year	Popula- tion	DISEASES							Totals	
		Small pox	Measles	Scarlet Fever	Diph- theria	Whoop'g Cough	Fever	Diarr- hoea	Num- bers	Rate per 1,000 living
1861	95220	1	3	5	6	11	111	152	292	3.06
1862	96960	..	42	225	20	36	128	71	523	5.39
1863	98731	12	80	134	24	16	37	68	391	3.96
1864	100531	228	6	17	17	48	72	118	498	4.95
1865	102363	3	14	20	7	50	74	122	317	3.09
1866	104230	1	16	34	26	46	85	117	330	3.16
1867	106130	..	82	15	4	23	74	140	338	3.18
1868	108064	..	46	107	18	57	119	117	526	4.86
1869	110034	1	57	295	18	26	105	100	602	5.47
1870	112040	1	39	119	13	46	91	121	430	3.83
1871	114083	39	42	30	10	66	72	100	366	3.28
1872	114970	514	52	5	21	17	112	113	834	7.25
1873	116380	45	16	12	15	19	97	106	310	2.66
1874	117810	2	56	36	19	104	101	149	470	3.99
1875	119260	..	54	47	18	8	103	141	371	3.11
1876	120730	1	109	457	11	42	71	131	822	6.80
1877	122210	..	12	36	5	59	87	153	322	2.63
1878	123710	..	36	16	1	92	96	170	411	3.32
1879	125250	..	10	11	4	9	62	73	169	1.35
1880	126830	..	42	9	20	48	70	192	381	3.00
1881	128691	..	7	25	205	66	60	73	436	3.38
1882	131535	..	156	40	106	36	107	111	556	4.22
1883	134441	1	10	16	20	54	93	80	274	2.03
1884	137412	..	164	9	41	9	58	116	397	2.88
1885	140448	..	7	5	42	44	93	123	314	2.23
1886	143552	1	197	18	65	102	124	191	698	4.86
1887	146724	3	8	26	47	41	53	151	329	2.34
1888	149966	..	50	12	17	27	27	98	230	1.53
1889	153279	2	8	11	33	92	32	122	300	1.95
1890	156667	..	4	19	47	39	50	105	265	1.69
1891	160128	..	223	9	23	38	33	73	399	2.49
1892	163667	..	38	18	26	87	42	99	310	1.89
1893	165153	..	120	32	29	36	54	247	518	3.13
1894	167878	4	139	14	34	41	29	93	534	3.18
1895	170672	..	39	7	18	64	37	238	403	2.36
1896	173565	..	126	19	20	60	28	157	410	2.36
1897	176497	..	35	11	22	65	44	286	463	2.62
1898	179500	..	73	31	54	42	44	183	427	2.38
1899	182576	..	50	22	120	62	75	316	645	3.53
1900	185725	..	3	11	104	87	93	159	457	2.46
1901	188885	..	82	15	70	21	43	311	542	2.87
1902	193969	..	70	14	62	92	54	159	451	2.32
1903	198049	..	17	27	75	34	23	115	291	1.46
1904	202171	..	1	22	71	76	34	213	417	2.06
1905	206336	..	218	11	69	45	18	173	534	2.58
1906	210546	..	8	3	60	63	17	226	377	1.79
1907	214797	..	169	4	61	57	30	60	381	1.77
1908	219095	..	14	8	49	55	26	48	200	0.91
1909	223436	..	104	19	66	27	33	54	303	1.35
1910	227821	..	64	30	56	52	39	54	295	1.29
1911	232221	..	28	21	72	40	26	290	477	2.05
1912	236732	..	95	29	124	52	22	57	379	1.60
1913	241256	..	25	20	87	16	23	112	283	1.17
1914	245827	..	39	5	79	50	29	71	273	1.11
1915	*202441	..	123	17	63	36	18	52	314	1.55

* Civil population only.

SMALL-POX.—No case of this disease occurred during the year. One case was notified to me on June 22nd, but subsequent observation showed that an error in diagnosis had been made. I was called in to see one other suspicious case, this also proved not to be small-pox. Arrangements have been made with the Gosport and Alverstoke Urban District Council for any cases of small-pox occurring in this Borough to be isolated and treated at the Small-pox Hospital at Elson.

Although there has been no case of small-pox in the Borough, several cases have occurred in other parts of the country. Owing to the gradually increasing number of children who escape vaccination, on the ground of the conscientious objection of their parents, the population of the town is not so well protected against an outbreak of small-pox as was the case formerly. Moreover, at the present time, owing to the influx of men in the Services from all parts of the country, there is very much more risk of infection being brought into the Borough.

TABLE VIII.
VACCINATION RETURNS FOR PAST SIXTEEN YEARS.

Year	No. of Births returned in birth sheets so registered from 1st Jan. to 31st Dec.	Successfully Vaccinated	Insus-ceptible to Vaccination	Had Small-pox	Dead Unvaccinated	Postpone-ment by Medical Certificate	Removed to Districts the Vacc. Officer of which has been appraised	Removed to places unknown	No. of these births remain-ing	No. in respect of which certificates of conscientious objections have been received
1899	4981	4171	37	..	645	18	36	21	7	23
1900	5036	4385	60	..	521	26	27	20	4	37
1901	5287	4564	16	..	587	14	38	18	2	41
1902	5192	4509	31	..	547	26	29	19	..	31
1903	5446	4831	12	..	471	23	35	24	..	50
1904	5609	4916	23	..	556	28	23	17	1	45
1905	5637	5015	15	..	477	25	35	26	..	44
1906	5891	5117	35	..	552	43	47	28	2	67
1907	5863	5069	20	..	495	40	63	25	2	149
1908	5998	5120	35	..	473	37	43	24	..	266
1909	5861	4938	46	..	430	40	33	26	2	346
1910	5809	4667	15	..	449	40	50	21	5	562
1911	5788	4376	57	..	510	41	43	42	6	713
1912	5658	4314	26	..	389	33	57	34	5	800
1913	5874	4321	35	..	409	44	48	27	12	978
1914	5749	4235	42	..	409	59	74	31	9	890
1915 (to June)	2718	2016	18	..	149	56	25	8	17	429

TABLE IX.
VACCINATION RETURNS—1st January to 30th June, 1915.

Registration Sub-Districts comprised in the Vaccination Officer's District	Number of Births returned in the Birth List Sheets as registered from 1st January to 30th June, 1915	Number of these Births duly entered by 31st Jan., 1916 in Columns 1, 2, 4 and 5, of the Vaccination Register Birth List Sheets, viz. :					Number of these Births which on 31st January, 1916, remained unentered in the Vaccination Register on account (as shown by Report Book) of:				Number of these Births remaining on 31st January, 1916, neither duly entered in the Vaccination Register (columns 3, 4, 5, 6 & 7 of this Return) nor temporarily accounted for in the Report Book (columns 8, 9 and 10 of this Return)
		Col. 1 Success- fully Vaccin- ated	Col. 2		Col. 4 Number in respect of whom Certifi- cates of Con- scientious Objection have been received	Col. 5 Dead Unvac- cinated	Postpone- ment by Medical Certificate	Removal to Districts the Vaccination Officer of which has been duly appraised	Removal to places un- known, or which cannot be reached; and cases not having been found		
			Insuscep- tible of Vaccin- ation	Had Small- Pox							
I	2	3	4	5	6	7	8	9	10	11	
1. North End and Buckland	891	639	11	..	175	45	9	8	1	3	
2. Kingston and East Southsea	595	430	3	..	115	28	9	6	1	3	
3. Portsea and Landport	691	536	1	..	65	49	23	5	4	8	
4. Portsmouth and Mid-Southsea..	541	411	3	..	74	27	15	6	2	3	
Totals	2718	2016	18	..	429	149	56	25	8	17	
VACCINATION OF CHILDREN whose Births were registered in this District from Jan. 1st to Dec. 31st, 1914, inclusive.											
1. North End and Buckland	1863	1319	11	..	383	109	16	19	6	..	
2. Kingston and East Southsea	1307	927	4	..	256	84	12	13	10	1	
3. Portsea and Landport	1387	1064	3	..	126	139	19	21	7	8	
4. Portsmouth and Mid-Southsea..	1192	925	24	..	125	77	12	21	8	..	
Totals	5749	4235	42	..	890	409	59	74	31	9	

SCARLET FEVER.—There were 885 cases of Scarlet Fever notified during the year, and the number of deaths was 17, giving a mortality of 1.92 per 100 cases. 630 or 71.1 per cent. of the cases were removed to and treated at the Milton Fever Hospital ; of these 14 proved fatal. The usual steps were taken to prevent the spread of the disease and for the disinfection of premises. No one specified cause could be discovered for the spread of the disease, but doubtless the public elementary schools, Sunday schools and cinema performances afford the most probable means of conveyance of infection from child to child.

TABLE X.

Showing the number of cases of SCARLET FEVER notified, the number of Deaths, and the percentage of Deaths to cases notified for the years 1884 to 1915.

Year	Cases notified	Attack-rate per 100,000 population	No. of Deaths	Percentage of Deaths to cases notified
1884 ..	266	194	9	3.38
1885 ..	314	224	5	1.59
1886 ..	343	239	18	5.24
1887 ..	647	441	26	4.02
1888 ..	465	310	12	2.58
1889 ..	728	475	11	1.51
1890 ..	573	366	19	3.31
1891 ..	326	203	9	2.76
1892 ..	1023	630	18	1.76
1893 ..	1176	712	32	2.73
1894 ..	458	273	14	3.06
1895 ..	311	182	7	2.25
1896 ..	524	302	19	3.62
1897 ..	699	396	11	1.57
1898 ..	710	395	31	4.65
1899 ..	578	316	22	3.80
1900 ..	348	187	11	3.16
1901 ..	452	239	15	3.31
1902 ..	603	310	14	2.32
1903 ..	1167	589	27	2.31
1904 ..	726	358	22	3.03
1905 ..	530	256	11	2.07
1906 ..	383	181	3	0.80
1907 ..	282	130	4	1.42
1908 ..	597	272	8	1.34
1909 ..	1165	521	19	1.62
1910 ..	1276	560	30	2.35
1911 ..	855	368	28	3.27
1912 ..	1407	594	29	2.06
1913 ..	1166	483	20	1.71
1914 ..	703	281	5	0.71
1915 ..	885	*437	17	1.92
Total (32 years)	21,686	Mean 359	526	Mean 2.42

* Calculated on estimated civil population, vide page 10.

TABLE XI.

Table showing the number of cases of SCARLET FEVER admitted to the MILTON HOSPITAL, the number of Deaths, and the percentage of Deaths to number of cases of Scarlet Fever admitted for the years 1884 to 1915.

Year	Cases admitted	No. of Deaths	Percentage of Deaths to cases treated
1884 ..	13	..	..
1885 ..	16	..	..
1886 ..	29	..	..
1887 ..	56	1	1.78
1888 ..	120	1	0.88
1889 ..	278	1	0.36
1890 ..	384	11	2.86
1891 ..	180	3	1.66
1892 ..	532	6	1.12
1893 ..	503	6	1.19
1894 ..	238	8	3.36
1895 ..	177	2	1.13
1896 ..	354	11	3.12
1897 ..	413	9	2.17
1898 ..	436	23	5.27
1899 ..	333	6	1.80
1900 ..	198	6	3.03
1901 ..	270	6	2.20
1902 ..	339	6	1.77
1903 ..	572	5	0.87
1904 ..	340	8	2.38
1905 ..	274	4	1.44
1906 ..	243	2	0.82
1907 ..	202	5	2.48
1908 ..	343	4	1.17
1909 ..	631	14	2.20
1910 ..	850	16	1.88
1911 ..	635	18	2.83
1912 ..	702	19	2.70
1913 ..	730	14	1.91
1914 ..	469	4	.85
1915 ..	630	14	2.22
Total (32 years) ..	11,490	233	Mean 2.02

DIPHTHERIA.—There was an increase of 156 in the number of cases of Diphtheria notified last year compared with the previous year. The number of deaths was however only 68, as against 79 in 1914, and the percentage of deaths to cases notified was 7.36, which is the lowest case mortality that has ever before been registered ; the average mortality among cases of diphtheria for the past 31 years has been 14.9 per 100 cases. This year's figures represent a reduction in the case mortality 53 per cent. is a very satisfactory fact to record. I am unable to account for this sudden decline, which was even more marked amongst the cases treated at

Milton Hospital ; I can only hope it may prove permanent, and the records of coming years will be watched with interest to see if this prove to be the case. 684 or 74.1 per cent. of the cases were removed and treated at Milton Hospital. The usual measures for the prevention of the spread of the disease were taken.

TABLE XII.

Table showing the number of cases of DIPHTHERIA notified, the number of Deaths, and the percentage of Deaths to cases notified, for the years 1884 to 1915.

Year	Cases notified	Attack-rate per 100,000 population	No. of Deaths	Percentage of Deaths to cases notified
1884 ..	174	127	41	23.44
1885 ..	173	123	42	24.25
1886 ..	232	161	65	26.72
1887 ..	260	175	47	19.08
1888 ..	128	86	17	13.28
1889 ..	126	82	33	26.19
1890 ..	212	135	47	22.69
1891 ..	140	87	23	16.42
1892 ..	121	74	26	21.48
1893 ..	140	84	29	21.48
1894 ..	139	82	34	24.46
1895 ..	124	72	18	14.51
1896 ..	124	71	20	16.12
1897 ..	148	83	22	15.07
1898 ..	283	157	54	19.08
1899 ..	566	310	120	21.20
1900 ..	568	305	104	18.30
1901 ..	454	240	70	15.41
1902 ..	495	255	62	12.52
1903 ..	633	319	75	11.84
1904 ..	601	297	71	11.81
1905 ..	457	221	69	15.10
1906 ..	430	204	60	13.95
1907 ..	423	196	61	14.89
1908 ..	434	198	49	11.28
1909 ..	494	221	66	13.36
1910 ..	470	206	56	11.90
1911 ..	554	238	72	13.00
1912 ..	1,051	444	124	11.80
1913 ..	959	397	87	9.07
1914 ..	767	312	79	12.99
1915 ..	923	455*	68	7.36
Total (32 years)	12 803	Mean 200	1811	Mean 14.92

* Calculated on estimated civil population (vide page 10).

TABLE XIII.

Table showing the number of cases of DIPHTHERIA admitted to the MILTON HOSPITAL, the number of Deaths, and the percentage of Deaths to cases of Diphtheria admitted, for the years 1884 to 1915.

Year	Cases admitted	No. of Deaths	Percentage of Deaths to cases treated
1884 ..	4	1	25.00
1885 ..	6	..	..
1886 ..	11	1	9.09
1887 ..	27	8	29.60
1888 ..	23	..	..
1889 ..	18	..	..
1890 ..	69	18	26.10
1891 ..	52	4	7.70
1892 ..	27	6	22.22
1893 ..	12	4	33.33
1894 ..	38	8	21.05
1895 ..	46	5	10.87
1896 ..	38	4	10.52
1897 ..	37	3	8.11
1898 ..	118	19	16.10
1899 ..	225	27	11.90
1900 ..	211	28	13.27
1901 ..	170	24	14.11
1902 ..	197	23	11.67
1903 ..	211	14	6.63
1904 ..	220	23	10.45
1905 ..	198	24	12.12
1906 ..	239	35	14.64
1907 ..	235	28	11.91
1908 ..	284	23	8.10
1909 ..	354	40	11.30
1910 ..	336	45	13.40
1911 ..	436	51	11.69
1912 ..	782	86	10.99
1913 ..	652	58	8.89
1914 ..	615	56	9.15
1915 ..	684	45	6.57
Total (32 years) ..	6,575	711	Mean 10.40

ENTERIC FEVER.—There was an extraordinary reduction in the cases of Enteric Fever notified during the year. During the past ten years the average annual number of cases has been 189 and the deaths 83 ; this year the total notifications only reached 97, among which there were 18 deaths. Such a large reduction has not been seen in the case of any other disease during recent years. It is the more gratifying because enteric fever is one of the diseases which are most affected by improved sanitary conditions, and the prevalence or otherwise of this disease is a fairly good guide to the success which is attending the efforts to improve the sanitary

condition of a district. As usual, enquiries were made to ascertain if shellfish—which I believe to be a very frequent cause of cases of enteric fever in this town—might have been the cause. It was found that 18 of the patients had previously eaten cockles within the incubation period, and in 8 cases cockles had been eaten raw. Five of the patients had previously eaten winkles.

During the year the “Public Health (Shellfish) Regulations, 1915” were issued by the Local Government Board. These are directed towards the prevention of the sale of shellfish gathered from polluted beds or layings until they have been relaid for a certain period. If this could be enforced it would prove a most valuable measure. Unfortunately it is most difficult in application. There is not so much difficulty in applying the provisions of the Regulations to reputable oyster growers, with definite beds and layings; these, for the sake of their business, if for no other reason, are as a rule only too anxious to take every precaution to protect their shellfish from pollution. The difficulty is in dealing with irresponsible cockle and winkle vendors. The Order which the Local Authority is empowered by the Regulations to make does not prevent the gathering of shellfish from layings known to be polluted, it only prohibits the distribution for sale for human consumption of such shellfish until they have been relaid (in an unpolluted laying) for such period as the Local Authority may determine. I do not see how these provisions can be enforced in this Borough. The cockle-men pick up the cockles in the various harbours and creeks round Portsmouth; the cockles are nearly all polluted, or at any rate are liable to pollution, and so far as I know there is no suitable place in the neighbourhood where the men could relay them for 14 days, even if they were disposed to take the trouble to do so. Further, when the cockles are being hawked in the street, or on sale in fish shops, there are no means of inspection by which it can be ascertained whether they have been relaid or not. The weak point in the Regulations seems to be that no power is given to make an Order prohibiting absolutely the collection of shellfish from known polluted sources. Doubtless there appear to the Local Government Board to be sufficiently good reasons why such drastic powers should not be granted to Local Authorities, but until some such power is granted I am afraid cases of enteric fever will continue to arise in the Borough from eating polluted shellfish. Further, I am afraid all the regulations in the world will not prevent children and others picking up cockles from the seashore and eating them raw.

TABLE XIV.

Table showing the number of cases of ENTERIC or TYPHOID FEVER notified, the number of Deaths, and the percentage of Deaths to cases notified, for the years 1884 to 1915.

Year	Cases notified	Attack-rate per 100,000 population	No. of Deaths	Percentage of Deaths to cases notified
1884 ..	539	392	58	10.76
1885 ..	762	542	93	11.48
1886 ..	1249	870	124	9.90
1887 ..	554	378	53	9.52
1888 ..	313	208	27	8.60
1889 ..	317	207	32	10.01
1890 ..	457	292	50	10.94
1891 ..	265	165	33	12.40
1892 ..	330	203	38	11.51
1893 ..	361	218	54	14.96
1894 ..	201	119	25	12.44
1895 ..	258	151	33	12.74
1896 ..	235	135	27	11.49
1897 ..	320	181	42	13.08
1898 ..	305	170	43	14.10
1899 ..	531	290	75	14.12
1900 ..	1083	583	92	8.49
1901 ..	324	171	43	13.27
1902 ..	448	230	54	12.05
1903 ..	216	109	23	10.65
1904 ..	223	110	33	14.80
1905 ..	165	79	18	10.91
1906 ..	146	69	17	11.64
1907 ..	233	108	30	13.73
1908 ..	207	94	26	12.07
1909 ..	274	122	33	12.04
1910 ..	251	110	39	15.14
1911 ..	159	68	28	17.61
1912 ..	140	59	22	15.71
1913 ..	126	52	23	18.25
1914 ..	189	76	29	15.34
1915 ..	97	47*	18	18.55
Total (32 years)	11,278	Mean 206	1,335	Mean 11.83

* Calculated on estimated civil population (vide page 10).

TABLE XV.

Table showing the number of cases of ENTERIC FEVER admitted to the MILTON HOSPITAL, the number of Deaths, and the percentage of Deaths to cases of Enteric Fever admitted, for the years 1884 to 1915.

Year	Cases admitted	No. of Deaths	Percentage of Deaths to cases treated
1884	2	..	..
1885	6	..	..
1886	66	4	6.06
1887	37	1	2.70
1888	35	..	..
1889	48	6	12.50
1890	114	5	4.38
1891	51	4	7.84
1892	81	6	7.41
1893	94	3	3.19
1894	53	3	5.66
1895	83	4	4.82
1896	76	6	7.90
1897	102	11	10.78
1898	92	14	15.22
1899	96	12	12.50
1900	157	18	11.46
1901	101	11	10.89
1902	105	13	12.38
1903	70	3	4.28
1904	73	9	12.33
1905	57	7	12.28
1906	72	7	9.72
1907	109	14	12.84
1908	102	15	14.70
1909	96	14	14.58
1910	114	13	11.40
1911	70	10	14.28
1912	71	9	12.67
1913	55	10	18.18
1914	110	17	15.45
1915	33	8	24.24
Total (32 years)	2,431	257	Mean 10.57

MEASLES.—There was a considerable increase in the deaths from Measles, which numbered 123, against 39 in the previous year ; 104 of these occurred amongst children under five years of age.

As far as the addresses could be ascertained, visits were paid by the Health Visitors, leaflets of instruction left, and advice as to the care of children given. I have written so often on this subject that there is nothing I can usefully add in this report.

CEREBRO-SPINAL FEVER.—For the first time on record this disease exhibited a certain prevalence in Portsmouth. Cerebro-spinal Fever, or Cerebro-spinal Meningitis, sometimes called Spotted Fever, is a disease caused by a micro-organism known as the Meningococcus, which affects principally the brain and spinal cord. It gives rise, as would be expected, to nervous symptoms, and proves very fatal in severe forms. During the last century several outbreaks of the disease occurred in Europe, but it was not prevalent to any marked extent in the British Isles until 1907, when outbreaks occurred at Glasgow, Edinburgh and Belfast. Since the commencement of the war the disease has broken out in various camps and barracks, and it is thought likely that the cases amongst the civilian population are directly or indirectly largely due to the spread of infection from these.

During the year I had brought to my knowledge 109 cases of cerebro-spinal fever in the Borough ; of these 62 occurred amongst the civilian population, 21 amongst men in the Army, 16 in men of the Navy, and 10 in the Royal Marines. Of the history of these cases in the Services I am unable to say much, as they were removed out of Portsmouth and treated in naval and military hospitals.

It will be seen from the following table that nearly all the cases occurred during February, March, April, and May, and that with the onset of the summer the disease rapidly disappeared.

DATE OF NOTIFICATIONS OF CASES.

	Civilian	Army	Navy	Marines	Total
January ..	—	1	1	2	4
February ..	13	7	5	4	29
March ..	29	6	2	3	40
April ..	11	2	4	—	17
May ..	6	3	4	1	14
June ..	2	2	—	—	4
July ..	—	—	—	—	—
August ..	—	—	—	—	—
September ..	—	—	—	—	—
October ..	—	—	—	—	—
November ..	1	—	—	—	1
December ..	—	—	—	—	—
	62	21	16	10	109

The ages of those attacked varied from under 1 year to 70 years, only 4, however, were above 25. The following table gives in concise form some of the principal facts elicited in regard to the cases :—

No.	Address	Age	Sex	Date of Onset	Bacteriological Confirmation of Diagnosis	Isolated in Hospital	If fatal, date of Death
1	Adair Road	4	male	Feb. 11	Yes	No	Feb. 11
2	Heyshott Road	3	male	Feb. 12	Yes	No	—
3	Kassassin Street	5	male	Feb. 16	Yes	Yes	April 18
4	Park Street	7	male	Feb. 12	Yes	Yes	—
5	Lower Church Path	10	male	Feb. 1	Yes	—	—
6	Kassassin Street	4	female	Feb. 17	Yes	Yes	Nov. 7
7	Stanshaw Road	9	male	Feb. 17	Yes	No	Feb. 22
8	Hellyer Road	7	female	Feb. 15	Yes	No	—
9	Kimberley Road	17	male	Feb. 19	No	No	Feb. 22
10	Brighton Street	24	female	Feb. 15	No	Yes	May 13
11	St. Ronan's Avenue	23	female	Feb. 23	Yes	No	—
12	Timpson Road	17	male	Feb. 23	Yes	Yes	Feb. 27
13	Highland Road	9	female	Feb. 25	Yes	No	—
14	Wilson Road	11	female	Feb. 28	No	—	Mar. 9
15	Teddington Road	8	male	Mar. 3	Yes	Yes	—
16	Highland Road	13	male	Feb. 25	No	—	April 7
17	Asylum Road	17	male	Mar. 1	—	No	Mar. 3
18	Manor Park Avenue	8	male	Mar. 2	—	No	Mar. 6
19	Westfield Road	6	male	Mar. 1	Yes	No	—
20	Albert Road	18	female	Feb. 28	Yes	No	Mar. 10
21	Rivers Street	7	female	Mar. 6	—	No	Mar. 11
22	Frensham Road	8	female	Mar. 8	No	No	Mar. 11
23	Highgate Road	3	female	Feb. 28	—	No	—
24	High Street	28	male	Feb. 26	Yes	Yes	—
25	Landport View	3	male	Feb. 27	—	Yes	Mar. 14
26	Melbourne Place	10	male	Mar. 3	—	Yes	Mar. 16
27	Hyde Park Road	14	female	Mar. 11	—	Yes	—
28	Besant Road	70	male	Mar. 3	—	No	Mar. 26
29	Matrimony Street	2	male	Mar. 11	—	Yes	Mar. 18
30	Fawcett Road	11	male	Mar. 10	Yes	—	Mar. 11
31	Clive Road	2	female	Mar. 12	—	Yes	April 11
32	Gains Road	4	female	Mar. 1	—	Yes	—
33	Sultan Road	16	female	Mar. 15	—	Yes	Mar. 17
34	Bristol Road	11	male	Mar. 10	—	No	Mar. 13
35	Stone Street	4	female	Mar. 14	—	Yes	—
36	Warren Avenue	16	female	Mar. 19	Yes	Yes	—
37	Martin Road	25	male	Mar. 20	—	Yes	Mar. 26
38	North Street, Portsea	13	male	Mar. 18	—	Yes	—
39	Unicorn Street	12	female	Mar. 7	—	Yes	—
40	Stanley Road	5	male	Mar. 21	Yes	Yes	—
41	Newcomen Road	17	male	Mar. 19	—	Yes	Mar. 29
42	Eastfield Road	3	female	Mar. 17	No	—	—
43	Cranleigh Road	10/12	male	Mar. 29	—	—	—
44	Nile Street	15	male	April 1	—	Yes	—
45	Crasswell Street	3	male	April 7	Yes	Yes	May 23
46	Hertford Street	38	male	Mar. 26	—	No	—
47	Sackville Street	7	female	April 8	Yes	Yes	May 31
48	Grayshott Road	8/12	male	April 15	Yes	No	April 23
49	Marylebone Street	10	male	April 16	Yes	Yes	June 9
50	Twyford Avenue	23	female	April 13	—	—	April 24
51	Clarendon Street	32	female	April 19	—	—	—
52	Malthouse Road	5	male	April 16	—	Yes	—
53	Stansted Road	24	female	April 21	—	Yes	May 8
54	Hollam Road	11/12	male	Mar. 22	—	Yes	—
55	Commercial Road	1	female	April 30	—	Yes	May 2
56	Samuel Road	11	male	April 2	—	No	April 26
57	Brougham Road	26	male	April 24	—	—	—
58	Catisfield Road	1	male	May 1	—	—	May 8
59	Arundel Street	23	male	indefin.	—	Yes	June 4
60	Fyning Street	6	female	June 13	—	Yes	—
61	Reginald Road	25	male	Nov. 11	No	Yes	—
62	St. James' Road	20	male	(?)	No.	Yes	Aug. 22

SUMMARY.

Total Cases .. 62 Case Mortality 56.4 per cent.
Deaths .. 35 Isolated in Hospital or Infirmary 33 or 51.6 per cent.
Diagnosis confirmed by Bacteriological Examination in 22 or 35.5 per cent.

AGES OF PERSONS ATTACKED (Civil population).

	0-5	6-10	11-15	16-20	20-25	Above 25
MALE	13	8	5	6	4	2
FEMALE	7	6	3	2	4	2
Total	20	14	8	8	8	4

In the previous year there was only one case of cerebro-spinal fever in the Borough, and this was a baby aged 5 months, who died suddenly, and the Coroner's Jury, in accordance with the evidence of the medical man who performed a post-mortem examination, certified the death to be due to cerebro-spinal fever.

The first case brought to my knowledge this year was that of a private at the Eastney Barracks, in whose case the onset of the disease was said to be on January 15th. The suggestion has been made that the disease might have been introduced into Eastney Barracks by some Canadian troops, who played a football match at Eastney against the Royal Marine Artillery, and stayed at the barracks for the night. The circumstances were investigated on behalf of the Admiralty by Temporary Surgeon-General H. D. Rolleston, M.D., F.R.C.P., R.N., who reported as follows: "It is known that four cases of cerebro-spinal fever occurred in the camp at Valcartier, in Canada, that there were three cases during the voyage to this country, and many in their camp on Salisbury Plain; but none of this Canadian team is known to have been a carrier or to have had the disease and none of the opposing Eastney team contracted cerebro-spinal fever. Swabs of the throats of the Eastney team, sent to Greenwich, were found to be negative by Fleet-Surgeon P. W. Bassett-Smith, R.N., C.B. The Canadian team slept in a separate room with some sergeants, none of whom had cerebro-spinal fever, and for the most part kept to themselves. They were, however, shown round Portsmouth by a member of the Eastney team, who was a friend of the private who first contracted the disease, and was also in daily contact with two men who went down with it on January 20th. It was impossible to trace this line of infection any further. If any connection is to be maintained between the Canadian and the Eastney epidemics, it must be assumed that there were at least two undetected carriers, one among the Canadian team, who transferred the infection to a member of the Eastney

team—probably the one who showed them round and was a friend of the private who first manifested the disease. On the other hand, the almost simultaneous outbreak of cases in other parts of the country, and the weakness of the assumption of the hypothetical carriers, make it probable that the epidemic was due to some undetected chronic carrier, and that the Canadians cannot be held responsible for the infection.”*

I do not think that the ascertained facts of the cases at Eastney support the suggestion that the disease was introduced into the Borough by the Canadians. Moreover, other cases broke out at almost the same time in other parts of the Borough, one at Hilsea Barracks, at the other end of the town, on January 19th, and two cases at the Naval Barracks, on January 20th and 26th. There were altogether twelve cases notified among men in the Navy and Army from January 15th to February 11th, which was the date of notification of the first civilian case, so that it is fair to assume that the disease was introduced into the district by means of men in the Services. This first case in the civil population was in a child, aged 4, living in Adair Road, Eastney. I found on making enquiries that this child attended the school at Eastney Barracks, and that the same school was used by the R.M.A. recruits, among whom several cases of cerebro-spinal fever had occurred. Whether this was actually the source of infection I am not prepared to say, I know of no recorded cases where the infection of cerebro-spinal fever has been deemed to spread by means of infected rooms. It is, however, worth recording, because our knowledge of the methods of the spread of the disease can only be determined by a careful dissection of all the facts which may possibly have a bearing on it. It is interesting to note that three other of the cases attacked also attended this school. As, however, these were all children of men in the Royal Marine Artillery, it is possible that they may have contracted the disease, not from the school, but from intercourse with some possible carriers among the Royal Marines.

The power of infectivity of cerebro-spinal fever is not very high, judging from our experience in this epidemic. In only two houses in which the disease occurred was there more than one case, and in each of these houses the date of the onset in both cases was practically the same, so that both probably contracted the disease at the same time from the one source. Moreover, it is uncommon, though not unknown, for medical men and nurses to contract cerebro-spinal fever from their patients. I think it will probably be found that

* Report on Cerebro-Spinal Fever in the Royal Navy (Aug. 1914—Aug. 1915) by Temporary Surgeon-General H. D. Rolleston, M.D., F.R.C.P., R.N.

the disease only spreads, apart from direct personal contact, such as may occur through a person coughing or sneezing in the face of another, in rooms which are warm, overcrowded and not ventilated. The greatest safeguards against this disease, as against most others, are fresh air, good ventilation and the avoidance of fuggy rooms.

The theory generally held is that the disease is spread by "carriers," *i.e.*, by persons who have the causative organism (the meningococcus) in their air passages, and these are diffused by coughing or sneezing, and in other ways, and are thus inhaled by other persons, who may consequently contract the disease. It is obvious therefore that as these carriers are as a rule in good health and not under any suspicion, it is extremely difficult to trace the agents by whom infection is carried. A large number of bacteriological examinations of the throats of persons who have been in contact with patients have been made in different parts of the country, in order to discover "carriers." The results, however, have been very far from uniform; in some cases, out of a considerable number of contacts, observers only find 1 per cent. to be carriers, whilst with others the percentage of carriers is said to be as high as 20. Moreover, the practical value of the results obtained from the examination of those who have been in contact with cases of the disease is somewhat impaired by the further discovery that 13 per cent. of persons who, so far as was known, had not been in contact with any case of cerebro-spinal fever, were also found to have the specific organism of this disease in their throats.

Assuming the "carrier" explanation of the spread of the disease to be correct, the facts ascertained in regard to some of the following cases are of interest. (I have already mentioned the four cases of children who are presumed to have contracted the disease at the Eastney barracks school.)

E.R., female, aged 23, taken ill on February 22nd. Her brother was a private in the A.O.C., and was sent home from barracks suffering from influenza, which spread to various members of the family, including E.R., in whom the symptoms developed into those of marked cerebro-spinal fever.

In many of the cases investigated, I found there had been a previous history of contacts having suffered from influenza. As the symptoms of some forms of influenza closely resemble those of cerebro-spinal fever, there is in these cases a doubt whether what was termed influenza was not really a mild form of cerebro-spinal fever.

A.M., female, aged 11. Taken ill on February 8th. Two of this girl's sisters had previously taken part in entertainments given to the troops in the Hilsea Hutments, where several cases of cerebro-spinal fever had occurred. Two or three days after this they both suffered from severe influenza, with marked head symptoms.

- F.K., male, aged 8, taken ill on March 3rd. Son of non-commissioned officer in the Royal Marine Artillery, who had been in bed a fortnight previously with severe influenza and head symptoms. The father was examined at Haslar Hospital and found not to be a carrier.
- H.H., male, aged 19. Taken ill on March 1st. Worked at a brewery, where he had to wash empty bottles returned from camps and barracks.
- D.G.I., female, aged 18. Taken ill on February 28th. Had been keeping company with a non-commissioned officer in the Royal Engineers. This man was examined by Captain Leon, R.A.M.C. (T.) and found to be a carrier.
- E.G.A.S., female, aged $3\frac{1}{2}$. Taken ill on February 28th. Had frequently been nursed by soldiers from barracks.
- W.F., male, aged 28. Taken ill on February 26th. Kept a public house, at which the customers were principally soldiers from neighbouring barracks, at which there had been several cases of cerebro-spinal fever.
- C.W., female, aged 14. Taken ill on March 11th. Her father was engaged as a scavenger at the Eastney Barracks.
- V.R.S., female, aged 4. Taken ill on March 1st. Her father, who was employed at the Royal Naval Barracks, had three weeks previously been in bed for three days with severe influenza, with throat symptoms. He was examined at Haslar Hospital, but found not to be a carrier.
- E.B., male, aged $6\frac{1}{2}$. Taken ill on March 1st. This child attended the Eastney Barracks Sunday School, her last attendance being February 21st. Both the child's mother and grandmother, living in the same house, had three weeks previously suffered from severe headache and influenza.
- I.M.M., female, aged 16. Taken ill on March 15th. Her brother in the Royal Navy came home on leave on February 16th, after having been in Haslar Hospital with pneumonia.
- K.M., female, aged 4. Taken ill on February 24th. Daughter of a soldier away from home, she had frequently been nursed by soldiers from barracks.
- J.B., male, aged 17. Taken ill on March 19th. History of a transient influenza which went through the house four weeks previously.
- W.K., male, aged 15. Taken ill April 1st. His brother, living at home, was a private in the Hampshire Regiment.
- T.E.D., male, aged 8 months. Taken ill on April 15th. Father of patient was a petty officer stationed at the Royal Naval Barracks. He was examined at Haslar Hospital, but found not to be a carrier.
- M.B., female, aged 24. Taken ill on April 21st. Her husband was an A.B. in the Navy. He was examined at Haslar, but found not to be a carrier.
- S.R., male, aged 17. Taken ill on February 19th. His sister, living in the same house, had been engaged as a nurse girl in another house where two children were taken ill with the disease on February 25th.

The above are the only cases where it has been possible to trace even a possible source of infection, and in many of these the evidence is not very strong. One or two points have been brought out in the investigations which may be worth mentioning. One was that in the case of

children it was frequently found that the patient has some time previously suffered from a blow on the head. In some of the cases amongst children the disease had followed upon recovery from an attack of measles. In other cases there was a history of other persons in the same house having suffered from influenza, with headache ; it is possible that these cases of influenza were in reality mild cases of cerebro-spinal fever. If this is so it might then be concluded that instead of there having been only the 62 cases of cerebro-spinal, namely, those which were notified, there were really a large number of mild cases about the town for whom a doctor was not called in, and that the 62 represent simply the severe cases of a fairly widespread epidemic. In that case the mortality of the actually notified cases, 56.4, would of course represent the disease as being much more fatal than it actually is. This would only represent the mortality-rate of severe cases.

I would add that no examination of " contacts " among the civilian population, in order to discover carriers, was attempted. A number of contacts, who were men in the Navy or Army, were examined by officers in Navy and Army medical branches, and through their courtesy I am enabled to give the results they secured. In regard to the civilian population, it was not carried out for several reasons, the principal being the depletion of my staff ; the fact that little practical value could be attached to the results obtained, because at that time the disease had not been sufficiently studied to enable bacteriologists to present a method of examination that could be relied upon ; and lastly, amongst the civilian population it is extremely difficult to make any satisfactory arrangement for dealing with a " carrier " should one be discovered. In the Navy and Army this difficulty does not exist, the men are under discipline and can be detained under observation as long as it appears necessary.

Considerable advance in the study of the bacteriology of this disease has been made during the past year, and it is highly probable that in the near future reliable methods for the examination of " contacts " will be evolved, there will only then remain the problem of dealing with such as are found in the civilian population.

As there was no ward available at the Milton Isolation Hospital for cases of this disease, it was arranged, by the kind co-operation of the Guardians, to receive such patients in the Union Infirmary. Later, owing to the absorption of part of the Union Infirmary by the War Office, this was no longer possible, and it was decided to clear the enteric fever wards of the two patients they then contained, and to utilise these

wards for cases of cerebro-spinal fever. This was done at the beginning of March and patients were subsequently admitted and treated there.

I wish to acknowledge the cordial assistance in my investigations always most readily afforded me by Surg.-General Dennis, C.B., R.N., Colonel Jennings, R.A.M.C., A.D.M.S., Portsmouth District, and other Medical Officers of the Services stationed in the District.

POLIOMYELITIS.—No case of this disease occurred during the year.

CANCER.—The number of deaths from Cancer showed an increase of 41 over the previous year, and numbered 238. The Local Authority is still pursuing its policy of issuing leaflets and publishing in the local Press warnings to the public to see early medical advice in connection with the premonitory symptoms of this disease. This, I believe, is undoubtedly having good effect, and resulting in the saving and prolonging of life.

TUBERCULOSIS.—There were 247 deaths from pulmonary tuberculosis during the year, a decrease of two upon 1914. This gives a death-rate of 1.15 per 1,000 living, if estimated on the civil population ; if all deaths from pulmonary tuberculosis (including those amongst men in the Services) are taken, the death-rate then, reckoning the total population to be 251,825 (*vide* page 9), would be 0.94, which would be the lowest recorded death-rate from this disease. The total number of deaths from all forms of tuberculosis was 353.

The total number of notifications received from private Medical Practitioners was 701, and of these 125 referred to cases which had previously been notified. Including 29 cases notified by the School Medical Officer, the total number of new cases brought to the notice of the Health Department during the year was 606.

Owing to the war we have been unable to make any progress toward completing the general scheme for dealing with tuberculosis which was adopted by the Council in 1913. It was hoped that at least we should have been able to commence the proposed tuberculosis hospital of 40 beds, to supersede the present small-pox hospital at Langstone. Plans were prepared and tenders invited ; we were prepared to spend £7,000 on it, inclusive, but as the lowest tender that was received for the building was over £18,000, or £450 per bed, nothing further could be done with the plans, and for the present at any rate the scheme has come to a standstill.

Dr. W. H. M. Rees, who had been acting Chief Tuberculosis Officer in the absence of Dr. Fairley on Active Service, left in September to take up the position of Medical Superintendent to the Winsley Sanatorium, and Dr. C. J. Alexander was appointed in his place. Dr. Stephen Green also acted during the year as Assistant Tuberculosis Officer.

As will be seen from the Tables, the total number of patients suffering from tuberculosis treated during the year was 472, of whom 166 were children. Several children, at the instance of the Local Insurance Committee, were sent to the Lord Mayor Treloar Hospital at Alton, and a number were sent to a home at Purbrook by the Care Committee. The latter continues to do good work, in spite of the fact that at the present time, with so many calls on the charitable, the funds available have been very limited.

TUBERCULOSIS DISPENSARY.

The work in this department proceeds very smoothly, and there is little change to be recorded in the routine measures adopted for the control and prevention of Tuberculosis.

The further development of the work has necessarily been prevented by the decrease in the medical staff, owing to the war, and indeed a decline in some of the activities is apparent. It is seen especially in the number of contacts examined during the year, which shows a decided falling off from previous years. This is regrettable, as no branch of the work is of more importance, allowing, as it does, opportunities of getting the disease in the early stage in some, and in many others preventing its onset. A special effort is now being made in this direction, and it is hoped that good results will follow from it. It is cases of this nature, as well as all doubtful cases sent by practitioners, that throw the greatest strain upon the examining officer; it is a comparatively easy matter to examine and classify undoubted cases of the disease; it is usually a most anxious and laborious task to pronounce definitely upon a suspicious case, and often times it is only possible to come to a decision after frequently repeated thorough examinations. The term "March past" so often used in connection with the examination of contacts, is a complete misnomer, and is very misleading, for casual examination of such persons is not only valueless, but may often do harm in giving a patient with early disease a false sense of security, and on the other hand may cause a depressent effect on him, by attaching exaggerated importance to a healed and inactive lesion.

Home visitation is carried out as far as possible by the Medical Officer, and much valuable information is attained thereby, not only in the opportunities afforded him for giving advice on the hygiene of the home, but a personal knowledge of the home surroundings of the patient is of considerable value in helping him arrive at a decision as to the best form of treatment to adopt in each individual case. The tuberculosis nurses visit each home at regular and frequent intervals, to see that the Medical Officer's orders are being carried out, and they render valuable assistance in educating the patient's friends as to the management of the disease, and the methods of preventing its spreading to other members of the family. When possible they arrange for "contacts" to be brought to the Dispensary for examination. Their duties are most important and they are performed in a most painstaking and careful manner.

Tuberculin treatment is still being carried on at the Dispensary in suitable cases and is found a useful adjunct to hygienic and other forms of treatment. It must not be inferred from this that tuberculin is used as a routine measure at the Dispensary. Neither this nor any other form of treatment is slavishly adhered to. Each patient is considered on his own merits, and is given that form of treatment deemed most advisable in his particular case.

The results of treatment are very difficult to estimate. The majority of patients who undergo sanatorium treatment are thereby greatly benefited in general health, and even the focus of disease in many is considerably reduced. It must be borne in mind however that a few months treatment in a sanatorium cannot effect a cure in such a chronic malady as tuberculosis. At most it may affect arrest of the disease and commence a cure, but the ultimate results of treatment depend on so many and so varying factors, that one can hardly hazard a guess as to what these results will be. With this consideration in mind we have felt it useless to prepare elaborate figures giving our results for the year, but a reference to Tables J and K will show that they compare favourably with those of the statistics of any other sanatorium or dispensary.

The routine adopted with regard to patients who have completed their course of treatment, is that they are told to return at once if they have any return of symptoms, and in any case they must not allow more than a month to elapse before reporting themselves. Later on this period is lengthened to two, three and six or more months, according to circumstances.

LANGSTONE HOSPITAL.

This little institution continues to do useful work, and in spite of its drawbacks, the value of it in the scheme for the treatment and prevention of tuberculosis in the borough cannot be over-estimated. The maximum number of patients that can be taken into the hospital is 19 (7 women and 12 men). Some of the men sleep in huts, so that in very boisterous weather it is not always easy to keep the full number of beds occupied, but on the whole the patients prefer the shelters even in bad weather, partly on account of their privacy, but more because they consider this as evidence of improvement.

The accommodation at Langstone is, however, quite inadequate to the needs of so large a Borough as Portsmouth, and it is only the difficulties of the situation arising from the war that have prevented, or rather postponed, the erection of a larger and more suitable building.

That the present site is a suitable one for such a building is evidenced by the fact that the large majority of patients in whom improvement is to be expected do well at Langstone. In fact, many who make no improvement in other sanatoria are found to derive considerable benefit from a stay there.

The management of the Institution is efficiently carried on by Sister Booker, assisted by Nurse Newton, the whole being supervised by the Medical Officer of the Dispensary, who pays routine visits twice weekly, and at such other times as may be necessary. The treatment adopted is that carried out in most sanatoria, open air, rest, regulated exercise, and such symptomatic treatment as is necessary. A full and varied diet is provided. The hospital is popular with the patients, due in a large measure to the unsparing efforts of the sister and nurses in the discharge of their duties, and to the care and attention which they give to their patients.

In reviewing the results of treatment at Langstone, it must always be borne in mind that a large percentage of patients admitted are in a too advanced stage of the disease to be sent to other sanatoria. In other words their outlook is doubtful. The patient gets the benefit of the doubt. If his improvement is sufficient to justify sending him elsewhere, as a rule he is transferred later to some other sanatorium, if not, he is kept in Langstone while improvement continues. In this way he obtains a valuable object lesson in the way to conduct his future life, and consequently the chances of his infecting others are not so great. In cases with no improvement the patient must of necessity return home, or if his

TABLE A.
PUBLIC HEALTH (TUBERCULOSIS) REGULATIONS, 1912.

Summary of Notifications during the period from 2nd January, 1915, to the 1st January, 1916.

	Number of Notifications on Form A.												Total Notifications on Form A.	Number of Notifications on Form B.				No. of Notifica- tions on Form C.		
	Primary Notifications.													Primary Notifications					Total Notifications (<i>i.e.</i> , including cases previously notified by other doctors.	
	0 to 1	1 to 5	5 to 10	10 to 15	15 to 20	20 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 and upw.	Total Primary Notiftns		under 5	5 to 10	10 to 15	Total			
Pulmonary :																				
Males ..	..	2	7	8	11	17	61	37	19	11	2	175	235	..	3	5	8	9	24	58
Females ..	..	3	12	13	14	29	57	28	18	11	3	188	226	..	3	7	10	11	12	36
Non-Pulmonary :																				
Males ..	5	22	42	14	8	6	9	3	1	..	..	110	120	..	1	7	8	9	1	5
Females ..	6	20	30	23	6	3	9	3	3	..	..	103	120	..	..	3	3	4	5	5

home conditions are such that others are likely to run risk of infection, efforts are made to have him admitted to a home for advanced cases.

In a place like Langstone, with open wards, which serve the combined function of dining room, recreation room, smoke room, and living room for all patients, obviously the presence in the ward of a patient who is very ill is a source of great distress to his fellows. Such a patient cannot be retained either in fairness to himself or the other occupants of the ward. Until separate rooms can be provided for such patients it will unfortunately be necessary for them to be nursed elsewhere.

TABLE B.

TABLE OF OCCUPATIONS OF PATIENTS.

Housewives	42	Clerks	8
Dockyard Work :		Charwomen	2
Fitters	2	Teachers	2
Labourers	11	Railway Workers	7
Shipwrights	7	Insurance Agents	2
Boilermakers	3	Baking Trades	3
Joiners	1	Hawkers	1
Blacksmiths	2	Tailors	8
Other Trades	7	Public Officials	2
Storemen	1	Laundry Work	2
Writer	1	Printing Trades	2
	—35	Hairdressers	3
Domestic Service	7	Musicians	1
Factory Workers	15	Single Trades	6
Building Trades	6	No Occupation	7
Shop Assistants	10	Dressmakers	5
Service Invalids :		Seamen	3
Navy	16	Barmaid	1
Army	8	Labourers	4
	—24		208

TABLE C.

Giving the results of the examination of patients at the Dispensary.

	Tubercular	Diagnosis Incomplete	Not Tubercular	Total
Adults ..	208	6	106	320
Children ..	166	3	72	241
TOTAL ..	374	9	178	561

TABLE D.

Showing particulars of 380 Patients found to be Tubercular.

Showing Age and Sex Table—ADULTS.

	16-19	20-29	30-39	40-49	50-59	60 & Over	Total
Male ..	12	36	38	23	9	2	120
Female ..	12	35	31	6	4	0	88

Age and Sex Table—CHILDREN.

	0-4	5-6	7-8	9-10	11-12	12-15	Total
Male ..	14	16	22	14	8	15	89
Female ..	9	12	14	12	12	18	77

TABLE E.

Showing the number of cases of Pulmonary and Non-pulmonary Tuberculosis.

	Pulmonary	Pulmonary Other Organs	Non-Pulmonary	Total
Adults ..	185	8	15	208
Children ..	41	10	115	166
TOTALS ..	226	18	130	374

TABLE F.

Showing the Distribution of the Disease in the Non-pulmonary Cases.

	Males	Females	Children	Total
Glands	2	2	99	103
General Tuberculosis ..	1	—	—	1
Joint	2	1	6	9
Ovary	—	1	—	1
Abdomen	—	—	1	1
Peritonitis	—	1	3	4
Kidney	1	—	—	1
Spine	1	—	2	3
Knee	1	—	—	1
Hip	—	1	3	4
Osteitis	1	—	—	1
Nose	—	—	1	1
TOTALS ..	9	6	115	130

TABLE G.

Showing the Number of Patients in each of the Three Stages of the Disease (Turban's Classification).

Stage I.	Stage II.	Stage III.	Totals.
72	87	85	244

Tubercle Bacilli were found in 67 of the above cases, *i.e.*, in 49 males and 18 females. One child is included among the 49 males.

TABLE H.

This Table gives particulars of "Contacts" who were examined at the Dispensary.

	Tubercular	Not Tubercular	Totals
Adults ..	8	27	33
Children ..	21	22	43
TOTALS ..	27	49	76

TABLE I.

Showing the number of Patients under treatment during the year.

Under treatment December 31st, 1914	...	98
Taken on during 1915	...	374
		<hr/> 472
Discharged during 1915	...	109
		<hr/> 363
Still under treatment at end of 1915	...	

70 patients have completed a course of tuberculin during the year, 48 have had a course of more than three months, and 22 for less than that time.

TABLE J.

Patients discharged during 1915 after three or more months' tuberculin.

ADULTS.
PULMONARY ONLY.

	Arrested		Better		Same		Worse		Died		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
Stage I.	1	3	—	4	—	—	—	—	—	—	1	7
Stage II.	2	2	2	4	1	—	1	1	—	—	6	7
Stage III.	1	1	4	3	2	2	—	—	1	—	8	6
TOTALS	4	6	6	11	3	2	1	1	1	—	15	20

NON-PULMONARY.

	—	—	—	1	—	—	—	—	—	—	—	1
--	---	---	---	---	---	---	---	---	---	---	---	---

CHILDREN.
PULMONARY ONLY.

	Arrested		Better		Same		Worse		Died		Totals	
	M	F	M	F	M	F	M	F	M	F	M	F
Stage I.	—	—	1	—	—	—	—	—	—	—	1	—
Stage II.	—	—	—	—	—	—	—	—	—	—	—	—
Stage III.	—	—	—	—	—	—	—	—	—	—	—	—
TOTALS	—	—	1	—	—	—	—	—	—	—	1	—

NON-PULMONARY.

	—	1	4	3	2	1	—	—	—	—	6	5
--	---	---	---	---	---	---	---	---	---	---	---	---

TABLE K.

Patients discharged under 'Three Months' Treatment.

ADULTS.
PULMONARY ONLY.

	Arrested		Better		Same		Worse		Died		Totals	
	M	F	M	F	M	F	M	F	M	F	M	F
Stage I.	—	1	1	2	—	—	—	—	—	—	1	3
Stage II.	—	—	3	1	1	—	—	—	—	1	4	2
Stage III.	—	—	1	2	—	—	—	—	3	2	4	4
TOTALS	—	1	5	5	1	—	—	—	3	3	9	9

NON-PULMONARY.

	—	—	—	2	—	—	—	—	—	—	—	2
--	---	---	---	---	---	---	---	---	---	---	---	---

CHILDREN.
NON-PULMONARY.

	—	—	—	2	—	—	—	—	—	—	—	2
--	---	---	---	---	---	---	---	---	---	---	---	---

TABLE L.

Giving particulars of the Cases in which Tubercle Bacilli were found in the Sputum.

Carried over from 1914	..	..	..	62
Applicants during 1915	..	..	..	67—129

14 of these cases were not treated here, for the following reasons :—
5 refused treatment
4 left town
1 was referred to the Infirmary
3 were referred to doctor
1 was not traced

Of the remaining 115 cases, 57 were discharged and 58 still under observation at the end of the year.

TABLE M.

Showing results in the 57 cases which were discharged during 1915, and in which tubercle bacilli were found in the sputum.

ADULTS.

	Arrested		Better		Same		Worse		Died		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
Stage I.	1	—	—	—	—	1	—	—	—	—	1	1
Stage II.	—	1	2	—	2	—	1	—	1	4	6	5
Stage III.	2	—	4	4	3	1	—	—	21	9	30	14
TOTALS	3	1	6	4	5	2	1	—	22	13	37	20

TABLE N.
LANGSTONE HOSPITAL

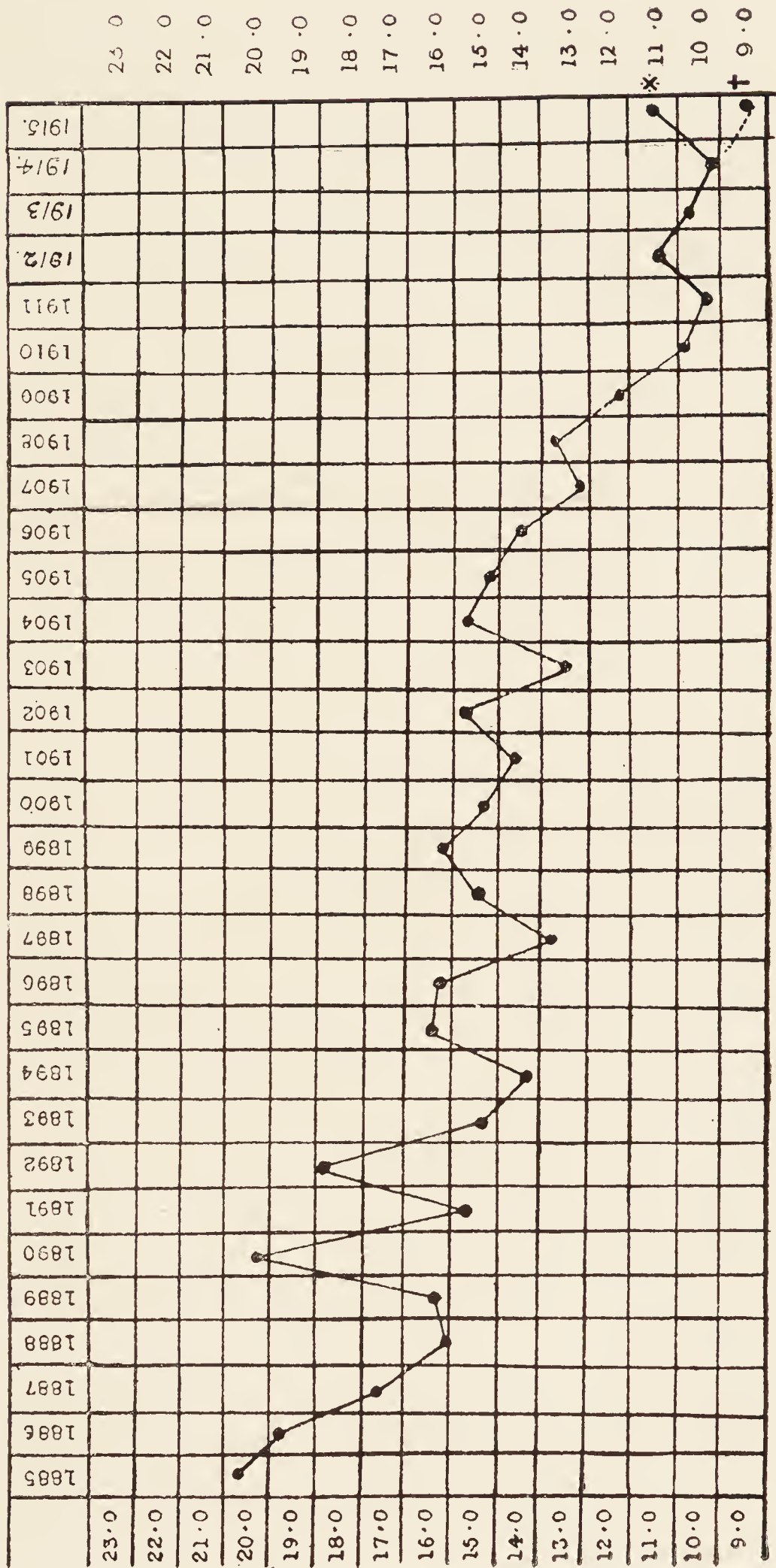
	Males		Females		Children		Totals
	Insured	Non-Insrd	Insured	Non-Insrd.	M.	F.	
In Langstone Dec. 31st, 1914 ..	7	—	4	3	—	—	14
Admitted during 1915	43	3	19	18	1	1	85
TOTALS	50	3	23	21	1	1	99
Discharged during 1915	40	3	18	18	1	—	80
In Langstone Dec. 31st, 1915	10	—	5	3	—	1	19

TABLE O.

Showing the state of health at the end of 1915 of the 80 patients discharged from Langstone Hospital during the year.

			Better	Same	Worse	Died	Totals
Males ..	Insured ..		12	13	4	11	40
	Uninsured		1	—	2	—	3
Females ..	Insured ..		7	8	1	2	18
	Uninsured		9	4	4	1	18
Children ..			—	—	1	—	1
TOTALS ..			29	25	12	14	80

TABLE XVI.
Chart showing Death-rate from Pulmonary Tuberculosis
per 10,000 Population since 1885.



* Calculated on estimated Civil Population

+ Whole Population

TABLE XVII.

Table showing the number of Deaths and Death-rates per 1000 living from
TUBERCULAR DISEASES for Thirty-seven Years (1879 to 1915).

Year	(1) Pulmonary Tuberculosis		(2) Tubercular Meningitis, Hydrocephalus Deaths	(3) Other forms of Tuberculosis Deaths	Totals of Cols. 2 and 3	
	Deaths	Rate			Deaths	Rate
1879	271	2.05	44	58	102	.77
1880	234	1.74	49	81	130	.96
1881	275	2.14	44	61	105	.81
1882	269	2.07	33	67	100	.76
1883	262	1.96	41	72	113	.84
1884	292	2.12	34	62	96	.69
1885	290	2.06	36	54	90	.64
1886	285	1.98	38	85	123	.86
1887	261	1.77	41	95	136	.92
1888	240	1.60	38	90	128	.85
1889	251	1.63	35	93	128	.83
1890	319	2.03	37	57	94	.60
1891	252	1.57	41	86	127	.79
1892	308	1.89	31	51	82	.50
1893	254	1.53	32	59	91	.55
1894	241	1.43	21	50	71	.42
1895	280	1.64	43	50	93	.54
1896	283	1.63	51	55	106	.61
1897	245	1.38	39	33	72	.39
1898	277	1.54	37	57	94	.52
1899	295	1.61	40	64	104	.57
1900	286	1.53	42	53	95	.51
1901	278	1.47	37	91	128	.67
1902	308	1.58	31	51	82	.42
1903	269	1.35	35	34	69	.34
1904	321	1.58	44	32	76	.37
1905	314	1.52	42	25	67	.32
1906	306	1.45	38	36	74	.35
1907	282	1.31	47	36	83	.38
1908	300	1.36	39	38	77	.35
1909	272	1.21	41	33	74	.33
1910	249	1.09	40	23	63	.28
1911	239	1.02	36	23	59	.25
1912	267	1.13	30	46	76	.32
1913	264	1.08	41	40	81	.33
1914	249	1.01	33	52	85	.34
*1915	233	1.15	51	69	120	.59

* Calculated on estimated civil population.

TABLE XVIII.

WEEKLY RETURN of cases of Infectious Diseases reported in accordance with the Infectious Disease (Notification) Acts, 1889 and 1899, during the year 1915.

Week ending		Small-pox	Scarlet Fever	Diphtheria	Fevers		Typhus	Puerperal Fever	Erysipelas	Epidemic Cerebro Spinal Meningitis	Polionmyelitis	Total
					Enteric	Con- tinued						
1915												
January	9	..	10	13	1	..	..	1	1	..	..	26
"	16	..	19	9	3	..	..	..	5	1	..	37
"	23	..	13	6	..	..	..	..	2	2	..	23
"	30	..	13	33	2	..	..	1	..	1	..	50
February	6	..	20	16	3	..	..	..	6	4	..	49
"	13	..	9	22	3	..	..	..	1	9	..	44
"	20	..	9	21	3	..	..	..	1	7	..	41
"	27	..	6	11	..	..	..	..	5	8	..	30
March	6	..	19	17	1	..	..	..	6	8	..	51
"	13	..	12	21	1	..	..	..	2	12	..	48
"	20	..	8	16	..	..	..	..	2	11	..	37
"	27	..	19	14	1	..	..	1	3	9	..	47
April	3	..	21	9	3	..	..	..	4	5	..	42
"	10	..	12	9	..	..	..	..	..	5	..	26
"	17	..	19	7	1	..	..	..	4	4	..	35
"	24	..	20	20	3	..	..	..	1	3	..	47
May	1	..	12	14	3	..	..	..	..	4	..	33
"	8	..	21	17	..	..	..	..	5	5	..	48
"	15	..	17	16	1	..	..	..	3	3	..	40
"	22	..	16	13	..	..	..	..	2	2	..	33
"	29	..	14	13	2	..	..	1	2	..	..	32
June	5	..	16	11	..	..	..	..	1	1	..	29
"	12	..	13	17	..	..	..	..	3	1	..	34
"	19	..	5	21	2	..	..	..	..	1	..	29
"	26	..	10	32	..	..	..	..	1	..	..	43
July	3	..	12	23	1	..	..	..	2	..	..	38
"	10	..	11	21	2	..	..	..	1	..	..	35
"	17	..	19	11	2	..	..	..	..	..	..	32
"	24	..	27	29	6	..	..	1	..	..	..	63
"	31	..	10	13	1	..	..	..	1	..	..	25
August	7	..	16	11	2	..	..	..	..	..	..	29
"	14	..	24	12	3	..	..	..	2	..	..	41
"	21	..	8	9	2	..	..	..	4	..	..	23
"	28	..	15	16	2	..	..	..	1	..	..	34
September	4	..	17	12	1	..	..	1	1	..	..	32
"	11	..	20	15	5	..	..	..	2	..	..	42
"	18	..	24	26	5	..	..	..	1	..	..	56
"	25	..	12	34	8	..	..	..	..	..	..	54
October	2	..	22	26	7	..	..	..	..	..	..	55
"	9	..	27	24	3	..	..	..	..	..	..	54
"	16	..	29	23	2	..	..	..	..	..	..	54
"	23	..	25	19	2	..	..	..	6	..	..	52
"	30	..	24	24	2	..	..	..	1	..	..	51
November	6	..	23	24	..	..	..	..	1	..	..	48
"	13	..	26	14	2	..	..	..	4	..	..	46
"	20	..	26	22	2	..	..	..	5	1	..	56
"	27	..	24	21	..	..	..	..	3	..	..	48
December	4	..	19	21	1	..	..	..	5	..	..	46
"	11	..	19	24	..	..	..	..	4	..	..	47
"	18	..	31	14	1	..	..	..	1	..	..	47
"	25	..	13	17	1	..	..	..	..	..	..	31
January	1	..	9	20	1	..	..	..	4	..	..	34
Totals ..		..	885	923	97	..	..	6	109	107	..	2127

VENEREAL DISEASES.—It has long been on my conscience that I ought to draw the attention of the Local Authority to the effect on the public health of the venereal diseases—syphilis and gonorrhoea. Although the present may not be, in some respects, the most opportune time for the institution of a system of municipal activity in the direction of prevention and cure of these diseases, I think the subject may well be broached in this report, with the view to inducing members to think over the matter, so that when a scheme is submitted for dealing with them, the subject will have been in some extent under review.

The ill effects caused by syphilis and gonorrhoea have in the past been insufficiently appreciated. It is now becoming evident that many diseases of middle life, which at one time were not thought to be connected with a previous attack of venereal disease, are, in fact, attributable to that source. Without specifying these by name, it is now generally accepted that they include a very large proportion of the various forms of heart disease, diseases of blood vessels, and affections of the nervous system. Further, syphilis is a frequent cause of antenatal death, abortion, miscarriage, still-births, and deaths in infancy. It cannot be disputed that venereal disease and its sequellae are having a powerful and baneful effect upon the public health.

Up to the present time the prevention and treatment of venereal disease has been a matter that local authorities have fought shy of. Not only this, but voluntary hospitals and other institutions have also refused in many cases to treat persons suffering from these diseases. This attitude on the part of hospitals is not logical ; moreover, it is impractical in view of the fact that in every large hospital a large number of the beds are usually occupied by persons suffering from the sequellae of venereal diseases. The attitude on the part of the public towards venereal disease is aptly described in a Local Government Report on Venereal Diseases, issued in 1913. It is as follows :—

“ Much of the difficulty of dealing with venereal diseases arises from the conception of venereal diseases as the just retribution of sin . . . Without going into the subject at length, it may be said that even if venereal diseases were spread by sexual intercourse alone, which is not the case, a retribution that falls upon innocent women and children, and with equal force upon a raw youth or girl as upon the vicious and abandoned, is not remarkable for its justice. This attitude of mind, however, prevails amongst a large section of the public. It prevents the charitable from

subscribing towards the proper cure and treatment of venereal diseases, it influences our general hospitals through their lay committees against the provision of accommodation for these diseases, and it emphasizes the stigma and disgrace attached to the inmates of lock hospitals and the lock wards of our Poor Law institutions. While it operates as a deterrent to the provision of proper treatment, it operates still more seriously by leading to concealment of the disease, and by preventing sufferers from seeking the aid and advice which is essential for their cure and for the prevention of the spread of the disease."

I believe the foregoing is unfortunately a correct representation of the state of mind of a large proportion of the public. One of its lamentable effects is that persons who contract venereal disease, instead of securing adequate medical treatment, are driven to consult unscrupulous quacks, with the worst possible results to themselves. It is a thousand pities that such an attitude should exist. That it is due to ignorance and a lack of appreciation of the facts connected with venereal disease is certain. It is doubtful whether the innocent victims of the disease do not nearly equal in number those whom some persons may regard as suffering a just retribution.

This should certainly not be the attitude of the Local Sanitary Authority. I suggest that for them the following are three incontrovertible facts, the time for the consideration of which has fully arrived :—

- (1) There exist in the Borough certain infectious diseases, widespread, causing ill-health and death, and adversely affecting the health of large numbers of the population.
- (2) That proper medical advice and treatment can do much to effect a cure and cut short the infectivity of these diseases.
- (3) That Health Authorities, not only here, but throughout the country, are doing practically nothing to protect the inhabitants of their districts against these diseases.

In this town, so far as I am aware, the only public provision for the treatment of persons suffering from venereal disease is that of the Union Infirmary. At one time there were lock wards for females at the Royal Hospital ; these, however, were closed some years ago, when the grant made by the Admiralty was discontinued.

I hope that eventually the Local Authority will consider that an obligation rests upon them to take steps, so that means

shall be provided by which persons, of both sexes, suffering from venereal disease may receive proper medical treatment.

For many reasons, into which I will not enter at this stage, I believe that this treatment would be most effectively carried out in connection with the Royal Hospital, but in special wards, and given by a specially trained medical man, the cost of the wards, both for indoor and out-patients and the salary of the medical officer being borne by the Local Authority. Above all things there is required the provision of the means for affording early and accurate diagnosis, with skilled advice and adequate treatment for all affected persons. Further, the general atmosphere pervading the management must be somewhat different to that too often associated with the institutional treatment of venereal disease in the past ; patients should not be treated as if they were the pariahs of society, but should be treated with consideration and a due regard to their feelings. Only by this means will their confidence be gained, their regular attendance for treatment secured, and some control over the disease in the Borough obtained.

The consideration of venereal disease is a matter which, for obvious reasons, has long been tacitly avoided. The result has been that no effective comprehensive measures have been instituted to control its ravages. Surely, however, it is time for local authorities to determine what may be termed the ostrich policy in regard to so serious a disease, I respectfully submit that the prevention and treatment of venereal disease is essentially a subject in which Local Authorities should take the lead, not only because it is a most difficult subject for private charity to deal with satisfactorily, but also because it is a matter very materially affecting the health of inhabitants of those districts for which Local Authorities are responsible.

INFANTILE MORTALITY AND CHILD WELFARE.—

The total number of deaths of infants under one year was 433, compared with 485 during the previous year. The infantile mortality rate, *i.e.*, the number of deaths under one year per 1000 births, was 87, a slight increase on the previous year, which was 84.8, but still considerably under the average of the past 10 years, which is 106 deaths per 1,000 births. An infantile mortality rate of 87 is extremely low for a large town, and it was not reached last year by any other town in the Kingdom of the size of Portsmouth ; the average rate for the 20 largest towns was 118 deaths per 1,000 births.

The total number of births notified was 4,705, and out of these 4,046 were visited by the Health Visitors, who subsequently paid 4,340 secondary visits to such cases as most urgently required them. It is satisfactory to note that the practice of mothers nursing their babies is on the increase, and that, at least, during the first month only 6 per cent. of the babies were being artificially fed. I have not been able to compare these figures with those for other towns, so am unable to state whether the favourable infantile mortality rate in this Borough is due to a larger portion of the babies being breast fed than in other places. It is a fact that cannot be too strongly impressed on the public, that natural fed babies have a far better chance of life than have those artificially fed. This is shown most markedly in the case of epidemic diarrhoea, for out of the 21 babies under one year who died from this disease, 17 were artificially fed and only 4 breast fed. There were five deaths from epidemic diarrhoea amongst infants from one to two years, and of these three had been weaned when a few weeks old.

There were 28 cases of ophthalmia neonatorum (inflammation of the eyes amongst the new-born) notified during the year. All were visited by the Health Visitors, and it is satisfactory to report that none of the babies lost their sight but all made complete recoveries. I think that in justice this result must at any rate be attributed to the assistance of the Health Visitors, who paid altogether 200 visits to these cases. Ophthalmia neonatorum is a frequent cause of blindness amongst children, especially when it has been set up by venereal disease.

The number of Health Visitors (three) is not sufficient to allow of as much visiting to mothers as could be desired, and our practice is to try and follow up those obviously in need of advice and assistance, to the neglect of others in whom the need is not so obvious. Owing to the difficulty of securing properly trained visitors the time is possibly inopportune to increase the staff in this respect, but with the increase in work, and with the necessity of rearing as large a proportion of babies as possible, which is becoming urgent from the economic standpoint, if from no other, the subject is one for early consideration.

The total number of Midwives on the register during the year was 46 ; they attended 3,100 cases, or 62 per cent. of the total births. Medical assistance was sent for, in circumstances required by the Rules of the Central Midwives Board, in 260 cases ; there were 74 still-births. 56 visits of inspection were paid to midwives, and 670 to midwives during their

attendance on cases. There was no case of puerperal fever notified during the year, and no case of malpractice occurred. I interviewed two unregistered women who had attended confinements, but in both cases I was satisfied no intentional infringement of the Midwives Act had occurred, and that it was unnecessary to take any legal proceedings.

I am very glad to be able to report that during the year the Local Authority decided upon a most important extension of the work for the prevention of infantile mortality and for the advancement of child welfare. The action taken was initiated by the following report presented to the Health Committee in July :—

To the Chairman and Members of the Health Committee.

GENTLEMEN,

The present is essentially a time when everything possible should be done by the Municipality to preserve and improve infant life. That action should be taken is urged both by the Local Government Board and by the Board of Education. This Committee has already done very good work in connection with infant life (as witness the fact that the infantile mortality of Portsmouth is the lowest of any town of its size in the Kingdom) but much more could be effected.

What is needed is a centre where mothers can come and bring their babies and receive advice in matters of child hygiene. This work has been already carried out to some extent by the Health Visitors, with considerable success, at their office at the Town Hall ; but now something further is needed, the scope of the work should be enlarged and amplified, and a centre should be established elsewhere.

At the present time there is little poverty or lack of money, but there is, and always has been, a considerable lack of knowledge of baby hygiene, and it is for this reason that so many babies are allowed to grow up into weakly children. It is to correct this that the Health Committee should forthwith establish a Maternity and Child-Welfare Centre.

This Centre would consist of a few rooms (four or five would be enough to start with), situated in a suitable part of the Borough. To start with, the centre would be open for two or three afternoons a week. As the work grows and becomes a success, as I feel certain it will, other sub-centres can be established in other parts of the Borough. At this centre mothers will be encouraged to bring their children, and will receive advice from competent persons on all sorts of matters connected with child welfare. By far the most important matter in regard to children is the question of diet ; other subjects are nursing, clothing, exercise, sleeping arrangements, etc. In addition, lectures will be given to mothers on various subjects connected with maternity, on the preparation of food, on food values, on child hygiene, and other allied subjects. In fact the object aimed at will be to make the place a centre for disseminating knowledge on all matters connected with the healthy upbringing of children.

The staff required at the centre would be—

- (1) A Medical Officer to attend two afternoons a week, to give advice in difficult cases, and to give lectures,

- (2) A Superintendent, who should be a trained nurse and qualified midwife.
- (3) Health Visitors. These would be the Health Visitors belonging to the Health Department, and also voluntary workers, of whom I anticipate no difficulty in securing a sufficient number.

As regards finance. Fortunately this need be a very small matter, and also it must be borne in mind that half the expense will be borne by the Local Government Board. Roughly estimated I do not think it need cost the Corporation at the outside more than £125 a year, made up as follows :—

Rent of rooms, lighting, heating, and cleaning, per annum	£60
Salary of Medical Officer for two or three hours twice a week	£50
Salary of Superintendent for three afternoons per week	£25
Furnishing rooms	£50
Other maintenance expenses, printing, stationery, and sundries	£50
Contingencies	£15
	<hr/>
	£250
Less Local Government Board Grant	£125
	<hr/>
Total Cost ..	£125

These centres have already been established in other towns, and have been found most successful. The management would be in the hands of the Health Committee, who might relegate it to a sub-committee, which might with advantage co-opt some ladies specially qualified for the work.

I regard the establishment of a Maternity and Child-welfare Centre as a matter of great urgency and importance, and I sincerely hope the Committee will approve of this scheme, or some modification of it, and will recommend its adoption to the Council, so that the work may be commenced without delay.

I have the honour to be, Gentlemen,
Your obedient servant,

A. MEARNS FRASER,

Medical Officer of Health.

This Report was agreed to by the Health Committee, and the principle of establishing a Maternity and Child Welfare Centre was adopted by the Council at its meeting on August 10th, when the Health Committee were authorised to do the following :—

- (1) To rent suitable rooms in a central part of the Borough for use as a Maternity and Child Welfare Centre.
- (2) To appoint the necessary Staff. Apart from the existing Officers of the Department and the Voluntary Workers, there will be required one Medical Officer for two or three afternoons a week, and a Superintendent for three or four afternoons. Possibly also a Caretaker may be required. The proposed salary of the Medical Officer is £50, and of the Superintendent £25 per annum.

- (3) To purchase such furniture, fittings, case books, and equipment as may be necessary.
- (4) To expend altogether on the Centre a sum not exceeding £250 during the year, and at the end of the year to report to the Council fully on the work done, and the manner in which the money has been expended.

A special sub-committee of the Health Committee was appointed to carry out the above. After going into the matter very carefully, this sub-committee reported that the premises known as 182 Fratton Road were the most suitable of those available for use as a Centre, and it was decided to take these at an annual rental of £50. Certain alterations were made, which give us one large room on the ground floor and first floor, and two consulting rooms on the first floor. There is also a covered-in shed and stables at the rear, which can easily be adapted for housing perambulators during wet weather. The situation is very good, being right in the centre of a large working class neighbourhood. Owing to delay in getting the alterations completed, the Centre was not opened till after the end of the year, but is now thoroughly equipped and a most satisfactory work is being carried out there.

The Medical Officer is Dr. Christian Matthews, who has undertaken the work for the duration of the war, and who had previously carried out very successful work at a voluntary school for Mothers organised at premises in Lake Road by the National Union of Women Workers. The work will undoubtedly grow in the future, and will necessitate the opening of at least two sub-centres in other neighbourhoods in the Borough. I look forward to very effective work being accomplished at this Centre in reducing infantile mortality in the Borough. I would like to report here that good work in the direction of child welfare had previously been carried out for some time at rooms in Lake Road by a Committee of the National Union of Women Workers, and we have the advantage of the help of many of these ladies, who are now giving their services at the Municipal Centre.

Chart showing number of Deaths under 1 year of age
to 1000 Births in Portsmouth, 1886-1915.



TABLE XIX.

Table showing the Relationship of Temperature and Fatal Cases of Summer Diarrhoea.

Week ending 1915			Temperature		Earth Therm.		Rain in inches	Deaths from Diarrhoea
			Max.	Min.	1 ft.	4 ft.		
July	17	..	64	53	63·3	61·3	1·29	1
„	24	..	65	55	63·0	60·7	·67	2
„	31	..	66	54	64·5	61·0	·31	..
August	7	..	67	58	64·1	61·6	·28	..
„	14	..	80	59	67·1	62·4	·14	2
„	21	..	68	54	64·1	62·7	·42	1
„	28	..	71	55	64·5	62·1	..	2
September	4	..	63	50	60·7	62·0	·61	..
„	11	..	68	49	59·3	60·4	..	2
„	18	..	70	56	62·4	61·5	·18	5
„	25	..	67	55	61·5	61·0	1·88	3
October	2	..	56	43	55·0	60·0	1·32	3
„	9	..	59	47	53·0	57·4	..	3
„	16	..	60	50	54·6	56·5	·04	2
„	23	..	58	46	52·2	56·1	·66	2
„	30	..	54	42	49·7	55·0	1·73	..
November	6	..	50	40	46·6	53·0	·70	3
„	13	..	51	40	45·8	51·2	1·53	..
„	20	..	45	31	40·7	49·7	·13	..
„	27	..	42	32	40·0	47·5	..	2

BACTERIOLOGY.—The following Table shews the amount of work that has been carried out in bacteriological investigation of suspected cases of infectious disease.

DISEASE	RESULT		TOTAL
	Positive	Negative	
Diphtheria	243	536	779
Tuberculosis	66	221	287
Enteric Fever	8	13	21
Other Diseases	21	10	31
TOTAL ..	338	780	1118

ROLL OF MIDWIVES PRACTISING WITHIN THE BOROUGH OF PORTSMOUTH.

SURNAME.	CHRISTIAN NAME.	ADDRESS.	No. of Cert.	Date of Certificate.	DATE OF NOTICE.
1 Adams	Charlotte	170 Talbot Road, Southsea	20448	April 27th, '05	January 6th, 1915
2 Barnes	Eliza L.	226 Sultan Road, Buckland	23295	April 26th, '06	" 6th, "
3 Barnes	Elizabeth	136 Queen Street, Portsea	27020	Oct. 15th, '08	" 6th, "
4 Broughton	Emily Jane	10 Curzon Howe Road, Portsea	40242	June 22nd, '14	" 7th, "
5 Challis	Kate	47 Aylesbury Road, Copnor	4208	April 28th, '04	January 7th, "
6 Chester	Henrietta	22 Besant Road	41688	Feb. 20th, '15	June 6th, "
7 Cooper	Annie Eliza	300 Queen's Road, Copnor	36435	Aug. 7th, '12	January 7th, "
8 Elliott	Mary Ann Leah	128 Prince Albert Road	5487	June 30th, '04	" 6th, "
9 Feehally	Charlotte Mary	227 Lake Road, Landport	3853	April 28th, '04	" 6th, "
10 Flynn	Ida	5 Addison Road, Southsea	19208	April 27th, '05	" 6th, "
11 Golding	Mary	10 Henrietta Street, Southsea	5703	Mar. 23rd, '05	" 6th, "
12 Gray	Eliza Ann	35 Herbert Street, Mile End	11585	Jan. 26th, '05	" 6th, "
13 Gwyther	Ada Lavinia	232 Chichester Road, North End	23045	Feb. 22nd, '06	" 6th, "
14 Geriché	Sarah Jane	14 Heidelberg Road	36802	Oct. 28th, '12	" 31st, "
15 Hayes	Annie	105 Toronto Road, Buckland	15559	Mar. 23rd, '05	January 10th, "
16 Holloway	Mary	47 Mafeking Road, Eastney	6226	July 21st, '04	" 5th, "
17 Humphrey	Eliza Ann	42 Simpson Road, Stanshaw	9290	Oct. 27th, '04	" 6th, "
18 Jago	Clara Sarah	83 Cottage Grove, Southsea	23268	Feb. 22nd, '06	" 6th, "
19 Jeffrey	Jane Elizabeth	219 St. Augustine Road, E. Southsea	10663	Dec. 22nd, '04	" 11th, "
20 Kean	Lucy Rowe	133 Eastfield Road, Southsea	31908	Sept. 30th, '10	" 10th, "
21 Kerby	Charlotte	2 Highland Street, Eastney	11214	Dec. 22nd, '04	" 6th, "
22 Langstreeth	Maria	5 Norfolk Square, Southsea	14211	Feb. 23rd, '05	" 6th, "
23 Lawrence	Catherine	135 Powerscourt Road, North End	2640	Mar. 24th, '04	" 6th, "
24 Maxfield	Elizabeth	64 Shearer Road, Buckland	3625	April 28th, '04	" 6th, "
25 Mills	Catherine	" Bold Forester," Albert Road, Southsea	3900	April 28th, '04	June 6th, "

ROLL OF MIDWIVES—Continued.

SURNAME.	CHRISTIAN NAME.	ADDRESS.	No. of Cert.	Date of Certificate	DATE OF NOTICE
26 Mills	Elizabeth	117 Church Road, Landport	39421	Dec. 17th '13	January 5th, 1915
27 Parkinson	Elizabeth A.	61 Milton Road, Copnor	34248	Aug. 8th, '11	" 9th, "
28 Paul	Margaret	264 Twyford Avenue, Stamshaw	35808	May 2nd, '12	" 6th, "
29 Phillips	Edith	80 Methuen Road, Eastney	3388	Mar. 24th, '09	" 6th, "
30 Pigg	Mary Ann	21 Montgomerie Road, Southsea	15662	Mar. 23rd, '05	" 11th, "
31 Ricketts	Marion	492 Commercial Road, Mile End	8755	Oct. 27th, '04	" 5th, "
32 Rust	Jane	146 Powerscourt Road, Copnor	40133	April 28th, '14	" 5th, "
33 Scholfield	Jane Ann	22 Besant Road, Landport	40133	April 28th, '14	" 5th, "
34 Silvester	Ann	23 Derby Road, Stamshaw	28886	June 19th, '09	" 5th, "
35 Stevens	Victoria May	75 Winter Road, Southsea	11818	Jan. 26th, '05	" 7th, "
36 Sansome	Maud Mary	14 St. Mary's Road, Kingston	27750	Dec. 16th, '08	" 5th, "
37 Taylor	Lily Mary	3 Posbrook Road, Milton	18246	April 27th, '05	" 6th, "
38 Treadgold	Eleanor Annie	22 Folkestone Road	41376	Feb. 11th, '14	" 27th, "
39 Tomes	Ellen	16 St. George's Square, Portsea	15515	Mar. 25th, '05	" 5th, "
40 Trowbridge	Ellen Mary	1 Collins Road, E. Southsea	22860	Nov. 23rd, '05	" 6th, "
41 Vincent	Kathleen B.	Berkeley House, Hollam Road	38470	June 13th, '13	" 26th, "
42 Westropp	Rebecca	17 Exeter Road, E. Southsea	11514	Jan. 26th, '05	" 7th, "
43 Wheeler	Laura	4 Jacob's Terrace, Aylward Street, Portsea	17931	Mar. 23rd, '05	" 7th, "
44 Wickens	Rose	83 Cottage Grove, Southsea	40927	Aug. 10th, '14	" 6th, "
45 Waters	Alice	32 Brompton Road	42960	Aug. 10th, '15	Sept. 23rd, "

TABLE XX.
TABLE OF ANALYSES OF PUBLIC WATER SUPPLY DURING 1915
BY THE PUBLIC ANALYST.
 (Results expressed in parts per 100,000.)

Date 1915	Source	Total Solid Residue	Volatile Solid Residue	Chlorine	Nitrogen as Nitrates	Total Hardness	Free or Saline Ammonia	Albu- minoid or Organic Ammonia	Oxygen absorbed in 2 hours at 100° F.	Remarks
Jan. 14	Co.'s Main, Arundel St.	31.8	5.0	1.5	.40	22.8	..	.0005	.014	Clear and Colourless
Feb. 11	do.	28.7	2.0	1.6	.45	22.0	.0005	.004	.047	do.
March 9	do.	32.7	6.0	1.6	.42	24.56	..	.001	..	do.
April 16	do.	31.7	6.0	1.6	.40	23.7	..	.0008	.02	do.
May 18	do.	30.5	2.0	1.5	.38	23.7	..	.002	.02	do.
June 25	do.	29.6	2.4	1.6	.42	23.7	..	.002	.01	do.
July 15	do.	30.2	2.3	1.5	.40	23.7	..	.0016	.014	do.
Aug. 16	do.	29.7	4.0	1.5	.40	23.7	..	.002	..	do.
Sept. 17	do.	28.8	2.0	1.4	.37	16.5	..	.006	.0175	do.
Oct. 22	do.	31.2	3.6	1.48	.576	17	Trace	.0036	.01	do.
Nov. 22	do.	30.8	1.6	1.6	.329	18	..	.0026	Trace	do.
Dec. 17	do.	28.0	2.8	1.48	.278	21.5	..	.004	.46	do.

WATER SUPPLY.—From the results of the monthly analyses of the public water supply given in Table XX. it will be seen that the water continues to reach a high standard of purity. Since the completion of the excellent system of filtration installed in 1909 the condition of the supply has been excellent, and it is now one of the best in the country.

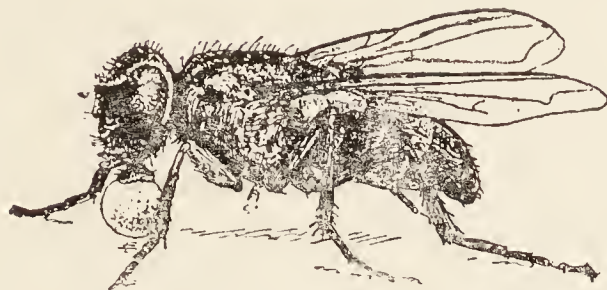
GENERAL SANITARY SUPERVISION.—Details of the various matters dealt with in connection with the general sanitary supervision of the Borough will be found in the Chief Sanitary Inspector's Report. Owing to the depletion of the Staff not so much inspection as usual was able to be carried out, but so far as possible all the most important matters received attention. Special attention was paid to the food supply, and frequent inspections made of places where food was prepared. Workshops, workplaces, and places where outworkers were employed, were visited, this year by the District Inspectors, instead of by the Workshop Inspector, Mr. Gray, who was put in charge of the clerical work of the Department, the whole clerical staff having joined the Services.

All premises on which cases of infectious disease occurred were visited and subsequently disinfected. The additions to the Milton Hospital are still in hand, and will, it is hoped, certainly be completed this year. Owing to the insufficiency of the present accommodation during the latter half of the year, it was impossible to remove at once all the cases of scarlet fever and diphtheria for which admission was requested. Further, in view of the necessity of providing accommodation for cases of cerebro-spinal fever, and as there were very few cases of enteric fever, it was decided to make use of the enteric fever wards at the Hospital for the former. So far as possible the few patients notified suffering from enteric fever who required hospital treatment were admitted to the Royal Hospital. When the additions to the Hospital are completed, I do not anticipate that we shall for some years again have any difficulty in admitting and treating all the patients for whom such may be necessary.

An attempt was made to induce the public to take steps for the prevention of the dangers of food infection by flies, and in May I prepared and issued the following leaflet :—

THE HOUSE FLY.

DANGERS FROM IT AND HOW TO PREVENT THEM.



*House-fly in the act of regurgitating liquid food.**

THE DANGER.—The great danger from flies is that they convey filth and disease germs to food. The fly seen on the dining-table has very likely come straight from the dust-bin, possibly from the expectoration of a consumptive, almost certainly from some form of filth. The house-fly is a disease and filth carrier.

DISEASES IT MAY CONVEY.—Flies have been proved to carry the germs of the following diseases :—

Typhoid or Enteric Fever.	Ophthalmia (inflammation of Eyes).
Hospital Gangrene.	Cholera.
Anthrax.	Plague.
Tuberculosis.	Infectious Sores.
Epidemic Summer Diarrhoea.	

Of these, perhaps the most important in this country is epidemic summer diarrhoea. During the hot summer months large numbers of babies die from intestinal complaints, owing to their milk and food having been infected by flies. Everyone must have noticed how flies settle on sores and diseased animals, and their opportunities of conveying all sorts of disease are unlimited.

HOW IT CONVEYS DISEASE.—Food is infected with disease germs by flies in the following ways :—

It may be done directly by contact ; a fly's legs are covered with fine hairs like a brush ; these become coated with whatever filth it has been visiting, and this in turn is deposited on the food it settles on.

It may also deposit the germs of disease in its excreta and in its vomits. (The probocis of the fly is in the form of a sucker, and its habit is to regurgitate its food,—these vomit spots may be seen as opaque light coloured spots on windows and other places.) By any or all of these means flies carry disease germs from filth and putrefying matter and deposit them directly on food about to be eaten. Thus disease is caused.

PREVENTION OF THE FLY DANGER.—For **intelligent** action to be taken to prevent the danger from flies the following points must be known and appreciated :—

In order to breed, flies must have decomposing garbage of some sort on which to deposit their eggs. Any sort of garbage will do, as long as

*Reproduced by permission from "House-Flies," C. G. Hewitt, Cambridge University Press.

there is warmth and moisture. The commonest substances are: stable manure, cow-dung, rotten fruit, and bad meat and meat bones; flies have often been found breeding in spittoons. Particularly about houses they breed in dust-bins and kitchen waste that is left lying about.

Flies breed from June to October, and mostly in the hottest months. A single female fly will deposit from 100 to 150 eggs at a time. These eggs hatch out into maggots and eventually appear as fully developed flies in nine or ten days. They can fly for any distance up to a mile, but probably do not go on an average more than 600 or 700 yards.

Appreciating these points the methods of preventing the fly danger are apparent. The one essential measure to be put into practice is that no house refuse, kitchen waste, garbage, or stable manure must be allowed to remain long enough for flies to be able to breed on them.

Sprinkle the dust-bin occasionally with paraffin, chloride of lime, or the Municipal disinfectant. Always keep the dust-bin covered.

Keep all food covered with wire gauze covers, and especially prevent flies from gaining access to milk or babies' food.

In the house kill as many flies as possible by fly-papers, fly-traps, fly poisons (two teaspoonsful of formalin in a pint of milk spread about in saucers is an effective fly poison), and by all other means.

Killing flies, however, is not striking at the root of the matter. This is only accomplished by the prevention of all breeding places, and it necessitates taking the trouble to see that no house refuse, kitchen waste, meat bones, fruit skins, etc., are allowed to lie about in the yards and gardens of houses.

It has been stated that in a certain lunatic asylum one of the tests applied to find out if a patient is sufficiently recovered to be discharged, is to give him a broom and put him in a room with a water tap turned full on. If he proceeds placidly to sweep up the water without turning off the tap, his standard of intelligence is not deemed to be high enough. The individual who endeavours to get rid of the fly danger by killing individual flies, and at the same time allows their breeding places to remain unheeded is intellectually not far removed.

In regard to the administration of the Sale of Food and Drugs Acts, 937 samples were taken, and of these 85, or 9 per cent., were certified by the Public Analyst to be adulterated. Particulars of the samples, and of the proceedings which were taken, will be found in the Chief Inspector's Report. The administration of these Acts in respect of samples of milk found to be below the standard of a good milk continues to be unsatisfactory. It is difficult to secure a conviction and an adequate penalty against dishonest dealers; it is also difficult at times to avoid inflicting hardship on innocent persons. The difficulty is that there is no absolute standard for the composition of milk. It is presumed that a genuine milk contains not less than 3 per cent. of fat, but if the milk on analysis is found to be deficient, in say, 10 per

cent. of fat, no proceedings for inflicting a penalty on the vendor can be successful if he can convince the Magistrates that the milk was sold as it came from the cow. Milk producers are usually able to produce evidence to substantiate their statements that the milk, although deficient in fat, was sold as it came from the cow. The retailer of milk, on the other hand, has great difficulty (unless he secures a "warranty," which the small retailer is unable to do) in securing similar evidence. In the latter part of the year the Board of Agriculture and Fisheries issued a Circular letter to Local Authorities, advising them not to take legal proceedings against "milk producers" without first giving them an opportunity of giving an explanation that might account for a deficiency in milk fat found by the Public Analyst in a sample. The value of such a course of action is very greatly diminished by the fact that Local Authorities have not the power of taking evidence on oath, and no penalty can be inflicted for the making of statements which might subsequently be found to be false. There are also what appear to me to be other strong objections to this course. The whole subject of the provision of a pure milk supply is one of the most difficult, and at the same time one of the most important, that yet remain to be solved.

In August the Borough Analyst, Mr. R. P. Page, was granted a Commission in the Hampshire Regiment, and Dr. Arthur Angell, Public Analyst for the County, was appointed temporarily Public Analyst in his place.

The following Table gives the particulars required by the Local Government Board as to the use of preservatives in milk and cream during the year :—

I.—MILK AND CRÈAM NOT SOLD AS PRESERVED CREAM.

	A Number of Samples examined for the presence of a Preserv.	B Number in which a Preservative was reported to be present.
Milk	549	One sample of Farmer's Milk contained traces of Formalin.
Condensed Milk	3	—
Skim Milk ..	8	—
Cream	Five samples, one of which was a test sample of tinned Preserved Cream and one sent in by a Private Person as Preserved Cream.	All the samples contained Boric Acid, varying from 0.15 to 0.27 per cent. Three vendors were asked for explanations and cautioned.

II.—CREAM SOLD AS PRESERVED CREAM.

(a) Instances in which samples have been submitted for analysis to ascertain if the statements on the label as to Preservatives were correct.

- (1) Correct statements made, 2
- (2) Statements incorrect, 0

(b) Determination made of milk fat in cream sold as Preserved Cream.

- (1) Above 35 per cent, 5
- (2) Below 35 per cent, 0

(c) There were no instances where the requirements as to labelling or declaration of Preserved Cream have not been observed.

(d) Thickening substances. No evidence of their addition to Cream or Preserved Cream.

(e) The Fat in the Cream not sold as Preserved Cream varied from 46.6 to 57.5 per cent.

(Preservative must not be added to Cream containing less than 35 per cent. by weight of milk fat.)

HOUSING.—Owing to the special conditions arising from the war, very little work has been carried out this year under the Housing of the Working Classes Acts. In particular the hopes of the Local Authority in connection with the provision of a reconstruction scheme in the Voller Street area have not been realised.

Demolition Orders were made by the Local Authority on May 11th in respect of 2, 6, 8, 10, 12, 14, 16, 18, 20, 28, 29, 30, 32, 34, 36, 38, 40, 42, 44, 46, 48, 50, 52, 54, 56 and 58 Voller Street. The owners of Nos. 44, 46, 48, 50, 52 and 54 appealed to the Local Government Board against a Demolition Order being made in respect of these houses, and an enquiry held by an Inspector of the Local Government Board on August 11th; the result of this enquiry was communicated to the Local Authority on November 9th, when the Order made by the Council was confirmed.

Demolition Orders were made by the Local Authority in respect of 1 Carver's Court, Highbury Street, on March 9th, and in respect of 2, 3, 4, 5, 6, 7 and 8 Carver's Court on February 9th.

Closing Orders were made by the Local Authority in respect of 1, 2, 3, 4, 5 and 6 Pavilion Place on January 6th, and subsequently Demolition Orders were made on August 10th.

Closing Orders were made by the Local Authority in respect of 60 Highbury Street, and 1, 2, 3 and 4 Keesings Court on January 12th; no Demolition Order was made in this case, as the premises were subsequently altered and converted into a workshop.

Closing Orders were made by the Local Authority in respect of 4 and 5 Church View, Milton, on March 9th; these houses were subsequently repaired and made fit for human

habitation, and the Orders were determined by the Local Authority at its meeting on August 10th.

Letters were sent to the owners of two other houses, advising that if certain repairs were not carried out the Local Authority would take into consideration the making of Closing Orders ; in both cases the repairs were effected.

A large number of dwelling houses have been inspected during the year and 1,072 house to house inspections made.

The new houses provided by the Local Authority in Curzon Howe Road and Kent Street, on the site formerly occupied by King's Bench Alley, Albion Street, White's Row, and Southampton Row are all occupied at a rental of 7s. a week. These houses are much sought after and could easily be let at a higher rental if it were advisable. The next houses provided by the Local Authority will be on the Voller Street site, and it is proposed, when the conditions of finance permit, to provide a number of two and three room tenements, which I believe to be very much needed in this Borough.

MUNICIPAL DISINFECTANT.—The establishment of the Municipal Disinfectant Station for the manufacture of Electrolised Sea Water Disinfectant Fluid has proved an unqualified success. In the first place there has been a net saving in cash on money expended on disinfectants during the year of over £100. This has been saved in the Health Department alone ; there have been further savings in those other Departments of the Corporation which employ the municipal disinfectant fluid instead of purchasing more expensive disinfectants elsewhere. Further, during the year 11,890 gallons of the fluid have been produced and issued in place of about 3,000 gallons which were available when disinfectants were purchased. Lastly, the municipal disinfectant fluid is not only much cheaper, but far more effective than the majority of disinfectants on the market. The net cost to the Department for the year was £143 6s. 11d., and the net cost per gallon of the disinfectant fluid was just under 3d. Previous to the installation of the Municipal Disinfectant Plant the cost of disinfectants purchased was 1/9 per gallon.

FACTORY AND WORKSHOP ACT.—Workshops and homes of out-workers have been inspected as far as possible, and an account of the insanitary conditions discovered during the course of inspections will be found in the following tables:

FACTORIES, WORKSHOPS WORKPLACES AND HOMEWORK.

1.—INSPECTION.

Premises	Number of		
	Inspections	Written Notices	Prosecutions
FACTORIES (Including Factory Laundries)	222	15	—
WORKSHOPS (Including Workshop Laundries)	1753	102	—
WORKPLACES (Other than Outworkers' premises included in Part 3 of this Report)	328	33	—
TOTAL ..	2303	150	—

2.—DEFECTS FOUND.

Particulars	Number of Defects			Number of Prosecutions
	Found	Remedied	Referred to H.M. Inspector	
<i>Nuisances under the Public Health Acts :—</i>				
Want of Cleanliness	46	46	—	—
Want of Ventilation	12	12	—	—
Overcrowding	2	2	—	—
Want of drainage of floors .. .. .	..	..	—	—
Other Nuisances	48	48	—	—
Sanitary { insufficient	6	6	—	—
Accommodation { unsuitable or defective .. .. .	..	..	—	—
{ not separate for sexes	4	4	—	—
<i>Offences under the Factory and Workshop Act :—</i>				
Breach of special sanitary requirements for bakehouses (ss. 97 to 100)	16	16	—	—
TOTAL ..	134	134	—	—

3.—HOMEWORK.

NATURE OF WORK	OUTWORKERS' LISTS, SECTION 107										OUTWORK IN UNWHOLE SOME PREMISES, SEC. 108			OUTWORK IN INFECTED PREMISES SECTIONS 109, 110		
	Lists received from Employers					Prosecutions										
	Sending Twice in the year		Sending Once in the year		Notices served on Occu-piers as to keeping or sending lists	Failing to keep or permit in-spection of lists	Failing to send lists									
	Outworkers		Lists	Outworkers												
	Con-tractors	Work-men		Con-tractors				Work-men								
Wearing Apparel— (1) making, etc. .. (2) cleaning and washing	82	250	1216	7	17	10	..	..	8	..	..	..	..
Furniture and Upholstery	..	6	2	..	..	..	..	..	..	..	..	..	..
Umbrellas, etc. ..	..	..	4	..	..	..	..	..	..	..	..	..	..
TOTAL ..	82	256	1224	8	17	11	..	..	8	..	..	..	..

4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of year	Number
Bakehouses ..	130
Dress and Mantle Makers ..	652
Milliners ..	290
Tailors ..	651
Other Workshops ..	793
Total number of workshops on Register ..	2516

5.—OTHER MATTERS.

Class	Number
Matters notified to H.M. Inspector of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (s. 133)	25
Action taken in matters referred by H.M. Inspector { Notified by H.M. Inspector as remediable under the Public Health Acts, but Reports (of action taken) not under the Factory and Workshop Act (s. 5) { sent to H.M. Inspector	10
Other	10
Underground Bakehouses (s. 101) :—	5
Certificates granted during the year	..
In use at the end of the year	..
	3

SUMMARY OF METEOROLOGICAL STATISTICS, 1915.

Barometer.—The mean barometer pressure for the year was 29.952 inches. The highest observed reading, corrected to sea-level, was 30.718 on November 21st, and the lowest 28.812 on January 3rd.

Temperature.—The mean temperature in the shade was 51.1° , or 0.8° above the normal.

MAXIMUM.—The mean maximum temperature in the shade was 57.1° , the highest being 79° on July 2nd.

MINIMUM.—The mean minimum temperature was 45.2° , the lowest being 27° on February 26th.

MAXIMUM IN SUN.—The mean maximum temperature in the sun was 98.7° , the highest being 137° on June 30th.

MINIMUM ON GRASS.—The mean minimum temperature on the grass was 40.8° , the lowest being 18° on November 27th.

EARTH TEMPERATURE.—The mean temperature at 1 foot below the ground was 51.7° , and that at 4 feet 52.5° .

Bright Sunshine.—The amount of sunshine registered by the Campbell-Stokes Recorder amounted to 1,776 hours. The greatest amount registered on one day was 14 hours 50 minutes, on June 15th.

Frosts.—The minimum thermometer in the shade, four feet above the ground fell to and below freezing point on 28 days, and that on the ground on 62 occasions.

Humidity.—The mean humidity of the air (Saturation 100) was 80.6.

Rainfall.—The total rainfall was 37.41 inches, or 9.44 above the average. The greatest fall of rain in 24 hours was 1.44 inches, on May 13th.

Snow.—Snow fell on four occasions and Hail on four.

Thunder and Thunder Storms occurred on two occasions.

RAINFALL.

The following table shows the total Rainfall and the number of days on which rain fell during each month, together with the greatest fall in 24 hours during the year 1915.

1915	Total amount in inches	Number of days on which 0·01 or more rain fell	Greatest fall in 24 hours	Date of greatest fall
January	4·48	20	·82	3rd
February	5·14	19	·76	16th
March	·78	9	·16	2nd
April	1·28	7	·47	6th
May	3·52	11	1·44	13th
June	·70	7	·28	29th
July	3·38	12	1·26	16th
August	1·19	13	·26	31st
September	3·06	6	1·40	24th
October	3·50	11	·70	31st
November	2·57	8	·80	11th
December	7·81	25	·90	26th
Total	37·41	148	1·44	May. 13th

The following table shows the total Rainfall for the past 20 years.

Year	Total rainfall in inches	Number of rainy days	Greatest fall in 24 hours	Date of greatest fall
1895	27·60	147	1·17	Oct. 30th
1896	25·54	156	1·31	Sept. 2nd
1897	28·87	163	1·13	Aug. 26th
1898	22·66	142	1·45	Nov. 23rd
1899	25·63	118	3·25*	July 23rd
1900	28·40	171	0·98	Jan. 6th
1901	24·31	131	1·30	June 30th
1902	24·22	148	1·14	Aug. 18th
1903	35·18	181	1·80	Sept. 4th
1904	26·70	177	1·36	May 20th
1905	24·05	153	2·35	June 5th
1906	28·74	161	1·85	Jan 2nd
1907	25·33	167	1·12	Oct. 14th
1908	20·49	144	0·95	„ 18th
1909	32·58	160	1·87	„ 26th
1910	31·36	168	1·32	„ 11th
1911	30·06	140	1·40	Aug. 22 & Oct. 24
1912	31·94	174	1·60	Sept. 29th
1913	29·96	165	1·09	Oct. 6th
1914	33·13	165	1·67	Dec. 9th
Means (20 years)	27·83	156	Greatest fall in 24 hours 3·25	July 23rd 1899
1915	37·41	148	1·44	May 13th

*Fell between 1.30 and 3 o'clock p.m. Sunday, July 23rd.

REGISTER OF RAINFALL IN 1915.

<i>Date</i>	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	<i>Date</i>
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	
1	·55	·19	..	..	·03	..	..	·10	·05	·18	..	·42	1
2	·35	·18	·16	..	..	·01	..	·04	..	·19	..	·37	2
3	·82	..	·13	·33	·24	..	..	·01	..	..	..	·57	3
4	·01	..	..	..	·01	..	..	..	..	..	..	·52	4
5	·01	·35	..	..	..	..	..	..	..	..	..	·52	5
6	·73	·20	·01	·47	..	..	·50	·09	..	..	..	·12	6
7	·18	·40	..	·08	..	..	·05	·04	..	..	..	·25	7
8	·04	·72	..	..	..	..	·56	·05	..	..	·08	·04	8
9	·01	·06	..	·10	..	·04	..	·05	..	..	·38	·74	9
10	·20	·20	·04	..	..	..	..	..	..	·04	..	·28	10
11	·01	..	·07	..	..	..	..	..	..	..	·80	·01	11
12	·07	·37	..	·26	·58	..	..	·04	..	..	·27	..	12
13	..	·46	..	..	1·44	..	..	..	·13	..	..	..	13
14	·01	..	..	..	..	..	·01	..	·05	..	..	·57	14
15	·07	..	..	..	·08	..	·02	·24	..	..	·09	·22	15
16	..	·76	..	..	·47	..	1·26	·15	..	..	..	·14	16
17	..	·26	..	..	·57	..	..	·02	..	..	..	..	17
18	..	·27	..	..	·03	..W	..	..	..	..	·04	..	18
19	..	·04	..	..	·06	..	·04	..	..	..	..	..	19
20	·26	..	..	·03	·01	..	..	..	..	·05	..	·10	20
21	·04	..	..	..	..	..	·03	..	..	·36	..	·18	21
22	·75	·50	·17	..	..	..	·56	..	..	..	..	·18	22
23	..	·08	·11	..	..	·03	..	..	·48	·25	..	·57	23
24	..	..	·06	..	..	..	·04	..	1·40	·60	..	·46	24
25	..	..	·03	·01	..	..	..	..	..	..	..	·20	25
26	·02	·02	..	..	..	·14	·27	..	..	..	..	·90	26
27	..	·01	..	..	..	·01	..	..	..	·31	..	..	27
28	..	·07	..	..	..	·19	·04	..	·95	·31	..	·02	28
29	..	..	..	..	..	·28	..	·10	..	..	·34	·04	29
30	·30	..	..	..	..	..	..	..	..	·51	·57	·04	30
31	·05	..	..	..	..	..	..	·26	..	·70	..	·35	31
Totals	4·48	5·14	·78	1·28	3·52	·70	3·38	1·19	3·06	3·50	2·57	7·81	37·41
Rain Days	20	19	9	7	11	7	12	13	6	11	8	25	148

TOTAL RAINFALL, 1891-1915.

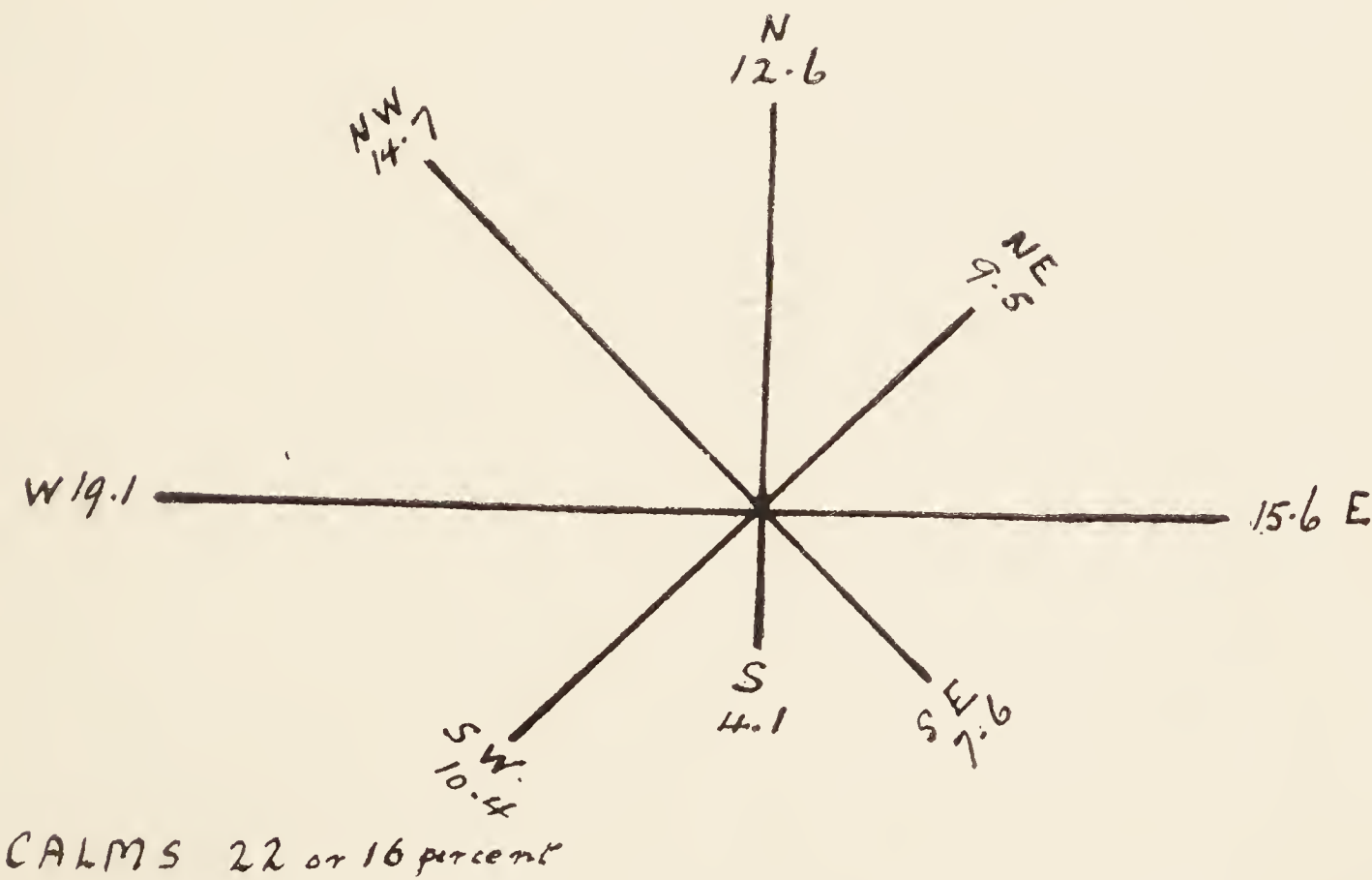
Year	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept	Oct.	Nov.	Dec	Total
	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.	
1891	2.37	.03	2.31	.97	2.31	2.27	1.71	5.01	1.26	6.49	3.00	3.51	31.24
1892	.88	.93	.96	.76	.99	1.92	2.80	2.86	2.62	3.76	2.85	1.94	23.27
1893	1.73	2.95	.49	.04	.78	1.32	3.62	.58	1.88	4.94	2.14	2.68	23.15
1894	4.39	2.11	1.48	1.83	1.02	1.77	4.79	1.79	3.03	5.35	6.39	1.93	35.88
1895	3.19	.02	1.64	2.18	.19	.75	3.58	2.75	.82	4.23	5.11	3.14	27.60
1896	.70	.33	3.02	.64	.53	1.44	.78	1.63	8.51	2.95	.94	4.06	25.53
1897	2.83	3.31	4.69	1.63	1.38	2.79	.63	3.65	2.97	.38	1.62	2.94	28.82
1898	.60	2.98	.58	1.15	3.16	1.50	.30	1.51	1.05	3.37	3.20	3.23	22.63
1899	2.77	2.57	.67	2.45	.71	.54	3.37	.81	2.76	2.54	5.12	1.28	25.59
1900	4.53	5.25	1.00	1.36	.93	1.69	1.10	2.04	.29	3.50	3.32	3.37	28.38
1901	1.17	1.42	2.23	2.34	.58	2.62	2.89	1.38	2.25	3.08	.38	3.96	24.30
1902	.91	1.63	2.03	1.28	2.08	2.87	1.77	4.13	.51	1.85	3.57	1.59	24.22
1903	2.12	1.61	2.46	2.50	2.49	2.19	2.61	4.33	2.99	7.90	1.71	2.27	35.18
1904	3.95	3.72	1.03	1.38	4.02	.87	1.26	2.30	1.76	2.06	1.32	2.94	26.70
1905	1.07	.51	4.43	1.57	.41	3.93	.25	2.47	2.38	1.88	4.51	.63	24.04
1906	7.13	3.25	1.21	.67	1.60	1.52	.43	.86	1.43	4.85	4.27	1.47	28.69
1907	.79	1.05	.34	3.48	2.57	2.04	1.14	.88	.52	6.99	2.46	3.04	25.30
1908	.92	.98	2.45	2.15	1.41	.68	1.31	2.33	1.05	2.36	1.36	3.48	20.48
1909	.84	.27	3.93	1.36	1.28	3.90	2.04	2.52	3.55	7.57	.70	4.61	32.57
1910	3.14	3.53	1.11	1.70	1.42	1.76	2.16	2.60	.09	5.06	3.93	4.85	31.35
1911	.92	1.44	1.58	1.51	1.53	1.55	.64	1.79	1.15	4.88	4.99	8.21	30.19
1912	3.59	1.91	3.78	.12	1.08	3.00	1.70	5.87	2.62	2.91	1.76	3.59	31.93
1913	4.34	1.17	2.75	2.65	2.45	.43	1.64	1.78	2.82	4.80	2.91	2.22	29.96
1914	.62	4.41	4.73	1.47	1.22	1.37	2.27	1.58	1.13	2.78	3.48	8.07	33.13
1915	4.48	5.14	.78	1.28	3.52	.70	3.38	1.19	3.06	3.50	2.57	7.81	37.41
Aver. 25 years 1891- 1915	2.39	2.10	2.06	1.53	1.58	1.81	1.92	2.34	2.10	3.40	2.93	3.47	28.30
Aver. 20 years 1896- 1915	2.37	2.32	2.24	1.62	1.71	1.86	1.58	2.28	2.14	3.76	2.70	3.68	28.32

WINDS.

The following Table and Chart shows the direction, velocity and percentage of Winds experienced in Portsmouth during the year 1915.

(Observations taken at 9 a.m.)

MONTH	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.	Force 0-12	
									Calms	4 to 7
January	7	4	4	..	1	..	8	5	2	14
February	5	1	1	..	4	4	7	5	1	14
March	7	4	6	4	1	..	3	5	1	17
April	7	3	7	1	1	3	3	5	..	15
May	1	4	12	5	1	2	2	2	2	9
June .. ..	..	1	10	4	3	2	7	2	1	3
July	3	..	..	..	1	5	12	9	1	3
August .. ..	..	1	1	..	1	6	9	8	5	..
September	2	..	8	2	..	2	7	5	4	4
October	4	9	3	7	..	1	..	2	5	2
November	9	7	3	2	..	3	3	3	..	3
December	1	1	2	3	2	10	9	3	..	2
TOTAL ..	46	35	57	28	15	38	70	54	22	86



ABSTRACT OF METEOROLOGICAL OBSERVATIONS

DATE —		Barometer reduced to Sea Level and 32° F.	TEMPERATURE								
			IN SHADE						IN SUN	ON GRASS	
			Mean 9 a.m.	Mean 9 a.m.	Mean Max.	Mean Min.	Mean of Max. and Min.	Highest Max.		Lowest Min.	Black Bulb in vacuo. Mean	Mean Min.	Low Min.
Week ending											
Jan.	9	29.454	45.2	48.3	41.4	44.8	52.	36.	68.8	38.3	35.5
„	16	29.876	45.5	49.5	42.6	46.0	53.	35.	68.4	38.8	29.5
„	23	29.877	38.4	43.4	36.7	40.0	48.	32.	66.3	33.5	28.5
„	30	29.753	36.4	40.1	33.6	36.8	44.	29.	57.4	30.7	22.5
Feb.	6	29.824	44.3	48.2	40.5	44.3	51.	33.	77.2	37.2	30.5
„	13	29.531	41.5	47.1	36.7	41.9	51.	31.	85.5	31.5	24.5
„	20	29.474	41.5	47.8	36.8	42.3	51.	29.	84.1	33.5	22.5
„	27	29.901	37.7	44.5	32.1	38.3	50.	27.	86.1	28.1	21.5
March	6	30.009	45.0	49.8	41.1	43.3	54.	35.	91.2	38.2	31.5
„	13	30.225	41.8	48.1	37.8	42.9	55.	33.	84.4	34.5	30.5
„	20	29.995	43.6	48.8	38.4	43.6	58.	28.	83.4	33.8	19.5
„	27	29.986	44.9	50.2	37.4	44.0	59.	29.	94.8	32.5	21.5
April	3	30.051	42.5	47.7	32.4	40.0	55.	29.	94.7	26.2	22.5
„	10	29.791	47.6	32.5	42.0	47.2	56.	38.	103.	38.0	29.5
„	17	30.235	48.6	54.8	41.5	48.1	62.	35.	107.1	37.3	28.5
„	24	30.174	48.0	54.3	39.3	46.8	58.	36.	108.7	35.0	30.5
May	1	30.162	53.7	62.0	43.7	52.8	72.	39.	111.0	40.1	35.5
„	8	30.031	57.7	64.0	48.2	56.1	72.	42.	118.1	44.2	39.5
„	15	30.070	53.8	60.0	44.0	52.0	68.	38.	108.2	40.2	32.5
„	22	29.974	55.2	60.8	48.7	54.7	74.	42.	108.0	46.2	36.5
„	29	30.063	63.6	70.5	51.0	60.7	78.	42.	122.8	45.7	37.5
June	5	30.142	56.2	61.4	46.2	53.8	65.	41.	111.7	41.1	34.5
„	12	30.045	63.7	70.7	34.8	62.7	77.	51.	126.2	52.2	45.5
„	19	30.180	61.1	67.5	48.8	58.1	74.	45.	127.7	43.8	40.5
„	26	29.991	62.1	66.2	52.5	59.3	72.	46.	118.5	49.2	38.5
July	3	29.981	62.2	69.0	50.7	64.1	79.	53.	129.4	50.7	48.5
„	10	29.997	63.7	68.7	56.8	62.7	73.	51.	123.4	53.7	47.5
„	17	29.812	61.0	64.8	53.5	59.1	67.	49.	118.1	49.5	41.5
„	24	29.960	60.9	65.6	55.2	60.4	67.	50.	122.8	52.3	44.5
„	31	30.002	60.7	66.4	54.1	60.2	68.	50.	123.8	48.7	44.5
Aug.	7	29.880	62.8	67.3	58.0	62.6	68.	54.	123.1	55.2	48.5
„	14	30.049	65.0	70.9	58.9	64.9	73.	55.	128.7	55.7	50.5
„	21	30.090	60.9	68.1	54.2	61.1	71.	51.	123.7	50.1	46.5
„	28	30.205	64.1	71.7	55.6	63.6	73.	52.	119.0	50.4	47.5
Sept.	4	29.935	56.8	63.7	50.6	57.1	67.	45.	115.0	47.0	41.5
„	11	30.290	62.0	68.4	49.2	58.8	71.	42.	117.4	43.4	35.5
„	18	30.180	63.9	70.0	56.2	63.1	74.	52.	133.8	52.0	46.5
„	25	30.045	62.5	67.2	55.2	61.2	70.	51.	113.2	51.1	47.5
Oct.	2	29.755	50.1	56.7	43.7	50.2	65.	37.	98.4	39.7	32.5
„	9	30.146	52.8	59.0	47.4	53.2	61.	43.	96.8	43.1	36.5
„	16	30.019	54.0	60.7	50.0	55.3	63.	46.	95.0	44.7	39.5
„	23	30.178	51.1	57.8	46.2	52.0	60.	40.	93.1	39.8	32.5
„	30	29.942	47.8	54.1	42.3	48.2	58.	36.	91.0	38.5	30.5
Nov.	6	29.790	44.2	50.5	40.6	45.5	57.	36.	86.2	37.0	32.5
„	13	29.580	45.5	51.6	40.3	45.5	57.	32.	84.4	35.3	24.5
„	20	30.260	34.8	45.7	31.8	38.7	46.	30.	77.1	25.2	21.5
„	27	30.403	35.3	41.8	32.0	36.9	43.	27.	65.0	28.2	18.5
Dec.	4	29.583	44.3	49.9	40.7	45.3	55.	31.	61.5	35.4	23.5
„	11	29.537	47.8	52.6	42.6	47.6	55.	35.	74.5	38.0	27.5
„	18	29.933	40.4	44.9	36.6	40.7	49.	31.	64.5	31.4	25.5
„	25	29.763	43.8	48.1	40.0	44.0	52.	33.	65.1	35.7	27.5
1916, Jan.	1	29.690	49.5	52.8	45.9	49.3	56.	43.	75.2	41.0	37.5

AND SOUTHSEA.

during the 52 weeks ending January 1st, 1916.

Mean of Earth below ground		Wet Bulb	Humi- dity	Total Bright Sunshine (Campbell- Stokes)		Amount of Cloud	WIND 9 a.m.										RAINFALL			
							Number of Days										Total (Ins.)	No. of days 0.01 inch or more rainfall	Greatest fall in 24 hours	Date of greatest fall
1 ft.	4 ft.	Mean 9 a.m.	Mean 9 a.m.	hrs. mins.	Mean, 9 a.m.	Calm	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.						
42.5	45.9	44.0	90.5	14 40	8.3	..	2	..	..	..	1	..	2	2	1.80	7	.82	Jan.	3
42.9	45.8	43.6	84.5	11 45	7.1	..	2	..	..	..	..	..	4	1	.36	5	.20	„	10
40.3	45.6	36.8	86.	19 55	7.0	..	4	..	1	..	..	..	1	1	1.05	3	.75	„	22
38.8	44.6	34.4	82.	2 20	10.0	1	..	3	3	..	..	..	..	..	.32	2	.30	„	30
41.5	44.0	43.0	89.	15 5	8.4	..	1	..	..	..	3	1	1	1	.97	5	.35	Feb.	5
41.3	44.8	40.2	89.	16 25	8.1	..	..	..	1	..	1	1	4	..	2.21	6	.72	„	8
41.2	44.2	40.4	91.	20 15	7.8	1	..	..	..	..	..	2	1	3	1.33	4	.76	„	16
39.1	44.1	35.9	84.5	35 15	6.4	..	5	1	..	..	..	1	..	..	.61	4	.50	„	22
42.5	43.8	43.0	84.5	24 15	6.0	..	1	..	..	..	..	..	2	4	.37	4	.16	March	2
43.2	44.9	39.9	85.	12 45	9.8	..	3	2	..	..	..	..	1	1	.11	2	.07	„	11
44.3	45.6	41.6	84.5	24 50	8.1	1	3	2	1	..	..	..	..	..	..	..	..	—	—
43.6	45.6	42.9	84.	30 15	6.1	..	1	..	1	4	1	..	..	..	.37	4	.17	„	22
41.2	45.3	39.0	74.	38 55	3.5	..	..	..	4	..	..	..	2	1	.33	1	.33	April	3
46.0	45.9	44.0	74.5	36 35	8.5	..	3	..	..	..	..	1	1	2	.65	3	.47	„	6
47.9	47.1	44.5	72.5	39 35	4.0	..	1	2	1	..	..	2	..	1	.26	1	.26	„	12
49.3	48.7	44.1	73.	47 45	4.4	..	3	1	1	1	..	..	..	1	.03	1	.03	„	20
51.0	49.3	48.9	70.5	57 50	4.8	..	..	..	5	..	1	..	1	..	.04	2	.03	May	1
54.7	51.0	54.0	77.5	46 5	4.8	1	..	1	2	1	1	..	1	..	.25	2	.24	„	3	
55.7	52.9	48.9	70.	46 25	5.2	..	1	..	3	1	..	..	1	1	2.10	3	1.44	„	13
55.5	53.2	52.6	82.5	30 55	7.4	..	..	1	2	3	..	1	..	..	1.14	5	.57	„	17
60.6	55.4	56.3	62.	81 15	2.1	..	..	2	4	..	..	1	..	..	..	..	..	—	—
58.1	55.9	52.5	76.5	56 5	6.2	1	..	..	1	..	1	1	3	..	.01	1	.01	June	2
63.3	57.3	59.1	74.5	48 0	5.4	..	..	1	1	1	1	1	2	..	.04	1	.04	„	9
62.8	58.9	55.4	68.	86 6	2.1	..	..	..	6	1	..	..	..	..	..	..	..	—	—
61.8	59.9	57.1	72.	35 32	4.7	..	..	..	3	2	1	1	..	..	.17	2	.14	„	26
64.0	60.1	58.6	79.	48 10	5.0	1	1	..	1	..	..	..	4	..	.48	3	.28	„	29
67.3	61.6	59.5	76.5	48 15	4.1	..	1	..	..	..	1	1	3	1	1.11	3	.56	July	8
63.3	61.3	56.5	73.5	26 35	7.1	1	..	..	..	..	..	1	2	3	1.29	3	1.26	„	16
62.9	60.7	57.3	78.	46 35	5.4	..	..	..	..	..	..	3	2	2	.67	5	.56	„	22
64.5	61.0	56.8	76.	66 30	3.8	..	..	..	..	..	..	..	4	3	.31	3	.27	„	26
64.1	61.6	60.1	83.	27 25	8.2	..	..	..	..	..	1	2	4	..	.28	5	.10	Aug.	1
67.1	62.4	61.6	80.5	54 55	5.4	2	..	..	..	..	..	4	1	..	.14	3	.05	„	8 & 9
64.1	62.7	57.2	77.5	55 35	3.1	1	..	..	..	..	..	..	2	4	.42	3	.24	„	15
64.5	62.1	59.0	72.	60 30	3.5	2	..	1	1	..	..	..	1	2	..	..	..	—	—
60.7	62.0	53.0	76.	43 0	5.0	..	1	..	..	..	..	..	2	4	.61	4	.26	„	31
59.3	60.4	57.1	72.	74 45	.7	1	..	..	3	1	..	..	1	1	..	..	..	—	—
62.4	60.5	60.7	81.	43 55	2.5	2	..	..	1	1	..	..	3	..	.18	2	.13	Sept.	13
61.5	61.0	58.7	78.	41 10	5.2	..	..	..	4	..	..	2	1	..	1.88	2	1.40	„	24
55.0	60.0	48.2	86.	25 50	4.2	1	..	..	..	1	..	..	1	4	1.32	3	.95	„	28
53.0	57.4	50.3	82.5	16 35	6.4	..	3	1	1	2	..	..	..	..	..	..	..	—	—
54.6	56.5	53.2	94.	15 55	7.1	3	..	1	2	..	..	..	..	1	.04	1	.04	Oct.	10
52.2	56.1	50.0	92.5	25 20	5.5	1	..	4	..	2	..	..	..	..	.66	3	.36	„	21
49.7	54.9	45.8	85.	19 30	7.1	1	1	3	..	1	..	1	..	..	1.73	4	.60	„	24
46.6	53.0	42.4	86.	29 10	3.0	..	2	4	..	1	..	..	..	..	.70	1	.70	„	31
45.8	51.2	43.5	84.5	20 0	5.1	..	..	..	..	..	..	2	3	2	1.53	4	.80	Nov.	11
40.7	49.7	33.5	86.	39 5	2.8	..	4	1	1	..	..	..	..	1	.13	2	.09	„	15
39.8	47.5	33.7	84.5	22 38	5.0	..	3	2	2	..	..	..	..	..	..	..	..	—	—
41.6	46.1	43.3	92.	— —	8.8	..	..	..	..	3	..	3	1	..	2.79	6	.57	„	30
46.0	47.4	46.2	88.	12 50	6.7	..	..	..	2	..	..	2	3	..	1.96	7	.74	Dec.	9
41.6	47.3	38.7	86.5	19 50	7.5	..	1	..	..	..	..	4	..	2	.93	3	.57	„	14
42.6	46.1	42.4	88.	9 40	6.7	..	..	1	..	..	1	1	3	1	1.69	6	.57	„	23
45.2	46.7	47.7	87.5	9 10	8.1	..	..	..	..	2	1	2	2	..	1.42	6	.90	„	26

MONTHLY WEATHE

Month	Baro- meter — Mean at 32° F. at Level and Latitude of Station	AIR TEMPERATURE								HYGROMETER		BRIGHT SUNSHINE	
		Mean of		Mean of A and B	Diff. from Normal	Absolute Maximum and Minimum				Dry Bulb	Humid- ity	Total in hours	
		A Max.	B Min.			Max.	Day	Min.	Day				
Jan. . .	29.767	45.3	38.6	41.9	+2.2	53	13th	29	30th	41.3	86	48.40	
Feb. . .	29.682	50.0	36.5	43.2	+2.6	51	13th	27	26th	41.0	88	87.0	
Mar. . .	30.051	49.0	37.4	43.2	+0.2	59	18th and 23rd	28	20th	43.5	82	131.0	
April . .	30.090	56.0	43.0	49.5	+2.0	72	28th	31	1st	49.5	73	181.45	
May . .	30.034	63.8	48.0	56.0	+3.0	78	25th	38	15th	57.6	71	204.40	
June . .	30.153	67.0	51.5	59.2	+0.2	77	8th	41	1st	61.0	74	273.0	
July . .	29.942	66.3	55	60.6	−1.8	79	2nd	49	13th	61.6	76	188.0	
Aug. . .	30.056	70.0	56.7	63.3	+0.9	74	8th and 25th	46	30th	63.5	78	198.25	
Sept. . .	30.041	65.1	51.0	58.0	−0.5	74	17th	38	30th	59.3	79	230.0	
Oct. . .	30.071	56.3	47.2	51.7	+1.4	63	12th 13th 14th	37	30th	51.5	88	78.45	
Nov. . .	29.835	47.0	36.0	41.5	−4.0	57	12th	30	23rd	40.0	85	111.35	
Dec. . .	29.701	49.4	40.8	45.2	+4.0	55	4th 9th 10th	31	14th	45.0	88	43.10	
Totals	359.423	685.2	541.7	613.3						614.8	968	1776	
Means	29.952	57.1	45.2	51.1	+0.8					51.2	80.6	148	

REPORT, 1915.

[illegible]

APPENDIX.—TABLE I.
Vital Statistics of Whole District during 1915 and previous years.

YEAR	Population estimated to Middle of each Year.	BIRTHS.		TOTAL DEATHS REGISTERED IN THE DISTRICT.		TRANSFERABLE DEATHS.		NETT DEATHS BELONGING TO THE DISTRICT.		
		Un-corrected Number	Nett.		Rate	of Non-residents registered in the District	of Residents not registered in the District	Under 1 Year age	At all Ages	
			Number	Rate				Number	Rate per 1,000 Nett Births	Number
1909	223,436	5820	..	26.40	13.62	..	..	556	95	..
1910	227,821	5801	..	25.41	13.14	..	..	603	104	..
1911	232,221	5787	5775	24.99	14.52	106	72	734	127	3289
1912	236,732	5605	5570	23.60	13.31	97	81	466	85	3125
1913	241,256	5989	5966	24.34	12.63	98	82	545	91	3080
1914	245,827	5714	5678	23.17	12.96	125	98	486	85	3149
1915	202,441	4975	4949	24.44	16.81	176	55	433	87	3284
Area of District in acres (land and inland water)—6,100.		Total population at all ages		..	..	231,141		At Census of 1911.		
		Total families or separate occupiers		..	..	51,705				

APPENDIX. TABLE II.—Cases of Infectious Disease notified during the Year 1915.

Notifiable Disease	Cases notified in whole District							Total Cases notified in each Locality						Total cases Removed to Hospital	
	At all Ages	At Ages—Years						1 Portsmouth	2 Portsea	Landport North	Landport Central	Mid-Southsea	6 Southsea		
		Under 1	1 to 5	5 to 15	15 to 25	25 to 45	45 to 65								65 and up-wards
Small-pox ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cholera, Plague ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Diphtheria (including Membranous croup)	923	2	226	579	63	48	5	44	318	210	264	82	684		
Erysipelas ..	109	4	9	7	15	29	5	17	30	23	21	13	..		
Scarlet fever ..	885	5	183	521	125	48	18	97	291	188	222	69	630		
Typhus fever ..	..	..	..	..	..	..	..	..	..	..	..	..	..
Enteric fever ..	97	..	11	35	13	31	..	4	31	33	24	5	33		
Relapsing fever and Continued fever	..	..	..	..	..	..	..	..	..	..	..	..	..
Puerperal fever ..	6	..	..	..	..	6	..	1	3	1	1	..	..
Cerebro- spinal meningitis	107	3	14	25	47	16	5	17	33	15	17	20	27		
Poliomyelitis ..	..	..	..	..	..	..	..	..	..	..	..	..	..
OphthalmiaNeonatorum	28	28	..	..	..	..	..	1	7	12	8	..	..
Pulmonary Tuberculosis	417	..	5	58	81	209	7	41	92	149	102	26	80		
Other forms of Tuber- culosis	230	11	42	120	23	30	4	26	62	75	46	17	6		
TOTALS ..	2802	53	490	1345	367	417	44	248	867	706	705	232	1460		

Isolation Hospitals or Sanatoria { 1. Milton Hospital for Infectious Diseases.
2. Small-pox Hospital at Elson (by arrangement with Gosport and Alverstoke U.D.C.)
3. The Langstone Consumption Hospital.

APPENDIX.—TABLE III.

Causes of, and Ages at, Death during the Year 1915.

CAUSES OF DEATH	Nett Deaths at the subjoined ages of "Residents" whether occurring within or without the District.									Total Deaths whether of "Residents" or "Non-Residents" in Institutions in the District.
	All ages.	Under 1 year	1 and under 2 years	2 and under 5 years	5 and under 15 years	15 and under 25 years	25 and under 45 years	45 and under 65 years	65 and upwards	
1	2	3	4	5	6	7	8	9	10	11
All Causes	3265	428	213	160	174	110	422	751	1007	878
Certified	19	5	..	..	..	1	1	3	9	..
Uncertfd.										
Enteric Fever	15	..	..	1	6	1	7	..	..	8
Small-pox .. ..	..	..	..	..	..	..	..	..	..	..
Measles	123	27	44	33	19	..	..	..	..	5
Scarlet Fever	17	1	2	7	5	1	1	..	..	14
Whooping Cough ..	36	12	12	11	1	..	..	..	..	..
Diphtheria and Croup	68	1	5	24	37	..	1	..	..	46
Influenza	51	1	1	..	4	3	7	16	19	2
Erysipelas	3	1	..	..	..	..	..	2	..	..
Phthisis										
Pulm. Tuberculosis	233	..	..	3	11	41	109	62	7	90
Tuberculous Meningitis	51	8	15	14	13	1	..	..	..	7
Other Tuberculous Diseases	69	15	13	5	4	10	13	9	..	17
Cancer, malignant disease	239	..	2	..	..	1	26	110	100	71
Rheumatic Fever ..	8	..	..	..	2	..	3	2	1	4
Meningitis	19	4	4	2	3	..	3	1	2	1
Organic Heart Disease	339	..	..	..	6	5	41	138	149	91
Bronchitis	308	45	24	5	3	1	9	54	167	45
Pneumonia (all forms)	248	64	54	24	11	5	17	42	31	32
Other diseases of respiratory organs ..	37	1	..	3	1	2	6	10	14	5
Diarrhoea & Enteritis ..	69	44	8	1	3	1	6	3	3	4
Appendicitis & typhlitis	11	..	..	..	3	3	3	1	1	12
Cirrhosis of Liver ..	20	..	..	..	..	..	6	12	2	7
Alcoholism	13	..	..	..	..	..	9	4	..	8
Nephritis and Bright's Disease	103	..	1	1	5	5	14	49	28	15
Puerperal Fever ..	6	..	..	..	..	..	6	..	..	3
Other accidents and diseases of Pregnancy & Parturition	20	..	..	..	..	2	18	..	..	5
Congenital Debility and Malformation, including Premature Birth	144	140	2	1	1	..	..	..	..	6
Violent Deaths, excluding Suicide	96	14	5	7	14	5	16	20	15	32
Suicide	17	..	..	..	..	4	7	4	2	5
Other Defined Diseases	915	53	1	18	21	20	92	215	475	342
Diseases ill-defined or unknown	6	2	..	..	1	..	3	..	..	1
TOTALS ..	3284	433	213	160	174	111	423	754	1016	878

APPENDIX.—TABLE IV. Infantile Mortality.

Nett Deaths from stated causes at various Ages under 1 Year of Age.

CAUSE OF DEATH.					Under 1 week	1-2 weeks	2-3 weeks	3-4 weeks	Total under 4 weeks	4 weeks and under 3 mths.	3 months and under 6 mths.	6 mths. and under 9 mths.	9 months and under 12 mths	Total Deaths under One Year
All causes—Certified					96	35	16	19	156	66	77	59	27	435
Uncertified					3	..	..	..	3	..	..	2	..	5
Small-pox .. .. .					..	..	..	..	..	..	..	..	..	..
Chicken-pox .. .. .					..	..	..	..	..	..	..	..	..	..
Measles .. .. .					..	..	..	..	..	..	3	5	19	27
Scarlet Fever .. .. .					..	..	..	..	..	..	..	..	1	1
Whooping-Cough .. .. .					..	..	..	..	..	1	4	5	2	12
Diphtheria and Croup .. .. .					..	..	..	..	..	..	..	..	1	1
Erysipelas .. .. .					..	..	..	..	..	1	..	..	..	1
Tuberculous Meningitis .. .. .					..	..	..	..	..	1	2	3	2	8
Abdominal Tuberculosis .. .. .					..	..	..	..	..	1	2	4	3	12
Other Tuberculous Diseases .. .. .					..	..	..	1	..	..	2	..	..	3
Meningitis (<i>not Tuberculous</i>) .. .. .					..	..	..	..	..	..	1	2	1	4
Convulsions					2	4	3	1	10	4	2	4	1	21
Laryngitis .. .. .					..	..	..	..	..	..	..	..	..	..
Bronchitis .. .. .					..	2	2	2	6	14	12	5	8	45
Pneumonia (all forms)					1	1	1	4	7	12	15	12	18	64
Diarrhoea .. .. .					..	1	..	1	2	5	13	4	4	28
Enteritis .. .. .					..	1	..	..	1	4	1	4	..	10
Gastritis .. .. .					..	2	1	..	3	..	..	2	1	6
Syphilis					1	..	..	2	3	..	1	..	1	5
Rickets .. .. .					..	..	..	..	..	..	..	..	..	..
Suffocation, overlying					4	..	1	..	5	2	2	2	..	11
Injury at Birth					2	..	..	..	2	..	..	..	..	2
Atelectasis					2	..	..	..	2	..	..	..	..	2
Congenital Malformations					4	1	..	..	5	1	3	2	2	13
Premature Birth					73	7	4	2	86	5	3	1	2	97
Atrophy, Debility and Marasmus					8	3	1	2	14	7	6	..	..	27
Other Causes					2	3	3	4	12	6	5	6	4	33
Totals					99	25	16	19	159	66	77	61	70	433

Nett Births in the year—Legitimate 4717
Illegitimate 232

Port Sanitary Authority.

To the Chairman and Members of the Port Sanitary Authority.

GENTLEMEN,

There has again been no case of infectious disease on any vessel arriving at the Port during the year. There were found 20 cases of insanitation, which were remedied under the supervision of the Port Sanitary Inspector.

The total number of vessels arriving at the Port was 5,418, and of these 4,678 were from places in the Solent, 668 from other British ports, and 72 from foreign ports. The following is the nationality of the foreign vessels :—

Norwegian	..	8	Dutch	..	4
French	..	10	Swedish	..	4
Danish	..	1			

I have the honour to be, Gentlemen,

Your obedient servant,

A. MEARNS FRASER, M.D.,

Medical Officer of Health to the Port of Portsmouth.

Milton Hospital.

To the Chairman and Members of the Hospital Committee.

GENTLEMEN,

I have the honour to submit my Annual Report for the year ending December 31st, 1915.

The number of admissions was 1,374, against 1,194 last year.

The number of deaths was 79 ; discharged 1,128 ; remaining 167. The combined mortality in respect of all cases was 5.7 per cent.

SCARLET FEVER.—Of this disease 630 cases were admitted, last year 469 ; discharged 517 ; died 14 ; remaining 99 ; the fatality rate being 2.2 per cent. Of the fatal cases three died 24 hours after admission. In the great majority of cases the disease was mild and was followed by the usual complications.

DIPHTHERIA.—Admitted 684, last year 615 ; discharged 571 ; died 45 ; remaining 68, the fatality rate being 6.5 per cent. Of the faucial cases, two died within 24 hours of admission, and one on the way to the hospital. In 10 cases obstruction to respiration necessitated operation ; tracheotomy was performed, 5 recovered, 5 died.

ENTERIC FEVER.—Admitted 33, discharged 25, died 8, the death-rate being 24.2 per cent. The small number of enteric admissions was due to the fact, that owing to the outbreak of Cerebro-spinal Meningitis, it was necessary to admit cases of that disease, the only accommodation available being the block usually occupied by enteric cases.

CEREBRO-SPINAL MENINGITIS.—Admitted 27, discharged 15, died 12, the fatality rate being 44.4 per cent.

ILLNESS OF STAFF.—Four Nurses contracted Scarlet Fever, 2 Diphtheria ; two Wardmaids, Diphtheria. All recovered.

I have to express my thanks to the Matron and Nursing Staff for their valuable help.

Your obedient servant,

JAMES MCGREGOR,

Medical Superintendent.

TABLE XXIII.

MILTON HOSPITAL.

NUMBER OF PATIENTS ADMITTED
during the Year 1915.

DISEASES	AGES								TOTAL
	0 to 1	1 to 5	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 and over	
Small-pox .. ..	..	..	..	..	..	..	..	..	..
Scarlet Fever ..	4	138	358	84	37	7	2	..	630
Typhoid Fever ..	..	3	12	6	8	3	..	1	33
Diphtheria	3	171	415	53	21	19	1	1	684
Cerebro-spinal Fever ..	1	9	11	5	1	..	..	..	27
TOTALS ..	8	321	796	148	67	29	3	2	1374

TABLE XXIV.

NUMBER OF PATIENTS ADMITTED to the MILTON HOSPITAL

(Small-pox Patients—Langstone Hospital) for the years 1883 to 1915.

Year	Small-pox	Scarlet Fever	Enteric or Typhoid	Diphtheria	Measles	Other Diseases	Totals
1883	5	1	..	..	1	..	7
1884	1	13	2	4	2	..	22
1885	8	16	6	6	1	..	37
1886	7	29	66	11	11	1	125
1887	20	56	37	27	4	3	147
1888	4	120	35	23	8	8	198
1889	6	278	48	18	5	8	363
1890	1	384	114	69	1	7	576
1891	..	180	51	52	22	18	323
1892	..	532	81	27	..	5	645
1893	6	503	94	12	6	5	626
1894	22	238	53	38	22	9	382
1895	..	177	83	46	15	25	346
1896	6	354	76	38	10	17	499
1897	..	413	102	37	6	11	569
1898	..	436	92	118	6	10	662
1899	1	333	96	225	..	2	657
1900	..	198	157	211	1	..	567
1901	1	270	101	170	..	..	542
1902	8	339	105	197	..	..	649
1903	3	572	70	211	..	2	858
1904	..	340	73	220	..	3	636
1905	10	274	57	198	..	..	539
1906	1	243	72	239	..	..	555
1907	..	202	109	235	..	..	546
1908	..	343	102	284	1	1	731
1909	..	631	96	354	1	..	1082
1910	..	850	114	336	..	..	1300
1911	..	635	70	436	..	..	1141
1912	..	702	71	782	..	..	1555
1913	..	730	55	652	..	..	1437
1914	..	469	110	615	..	..	1194
1915	..	630	33	684	..	27	1374

Report of the Chief Inspector of Nuisances

FOR THE YEAR 1915.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

I have the honour to submit my Thirtieth Annual Report as Chief Inspector of Nuisances of the work carried out by the Department during the year 1915.

Owing to the scarcity of labour a good deal of difficulty has been experienced in getting work carried out within a reasonable time of the service of Notices, although owners of property have loyally endeavoured to meet the requirements of the Department. At the end of the year a large number of Notices were outstanding, but in nearly every case orders had been given for the work to be executed, and it was only necessary to take proceedings in the Police Court in three instances for the abatement of Nuisances.

2,401 Preliminary, and 736 Statutory Notices were served, and the following works were carried out under the supervision of your officers, viz. :—

DRAINAGE DEFECTS.

Drains Cleansed	..	..	..	..	459
„ Repaired or re-laid with cement joints	..	..	..	..	232
„ Ventilated or ventilating shafts repaired	..	..	..	..	17
Waste or rain-water pipes disconnected	..	..	..	..	9
Soil pipes ventilated or repaired	..	..	..	..	11
„ „ removed outside houses	..	..	..	..	3
New water-closet pans provided	..	..	..	..	234
Pedestal water-closet apparatus provided	..	..	..	..	8
Water-closet fittings repaired	..	..	..	..	254
Flushing apparatus provided to water-closets	..	..	..	..	135
„ „ „ urinal	..	..	..	..	1
Extra sanitary accommodation provided in workshops	..	..	..	..	6
Separate „ „ „ „	..	..	..	..	4
Waste pipes provided, repaired or trapped	..	..	..	..	128
Glazed stoneware sinks provided	..	..	..	..	50
Water-closets ventilated	..	..	..	..	5
Yards drained	..	..	..	..	4
Premises connected with the main sewer	..	..	..	..	6

SANITARY DEFECTS IN CONNECTION WITH DWELLING-HOUSES AND WORKSHOPS.

Rain-water spouting cleansed, provided, or repaired	..	..	618
Roofs repaired	..	..	736
Outside walls protected or weather tiling repaired	..	..	166
Flooring, stairs, or doors repaired	..	..	315
Sashes, lines or sash frames repaired	..	..	319
Fixed window sashes made to open	..	..	62
Space under floors ventilated	..	..	91
Damp courses repaired or provided	..	..	28
Houses or parts of houses cleansed and distempered	..	..	290
Walls and ceilings repaired	..	..	185
Sanitary dustbins provided	..	..	7
Dust Chute cleansed	..	..	1
Yards repaved or paving repaired	..	..	553
Urinals cleansed or repaired	..	..	2
„ provided	..	..	1
Water-closets cleansed	..	..	20
„ „ reconstructed	..	..	2
Overcrowding in dwelling-houses abated	..	..	32
„ „ workshops abated	..	..	2
Water Supply provided to dwelling-houses	..	..	15
Rain-water tanks removed	..	..	2
Foundations of houses concreted	..	..	7
Occupation of cellar-dwelling discontinued	..	..	1
Gipsy Caravans cleansed	..	..	6
Workshops cleansed and limewashed	..	..	46
„ ventilated	..	..	12
Ironing Stoves ventilated	..	..	3
Floors of Workshops drained	..	..	2
Other Nuisances in connection with dwelling-houses abated	..	..	97
„ „ „ „ workshops abated	..	..	48
Smoke Nuisance abated	..	..	1

OFFENSIVE MATTER, &c.

Manure removed	..	..	22
Offal and bones removed	..	..	5
Refuse removed	..	..	51
Animals removed	..	..	13
Stagnant water removed	..	..	9
Bedding cleansed	..	..	7
Cesspits	..	..	6

SLAUGHTER-HOUSES, COWSHEDS, BAKEHOUSES, &c.

Slaughter-houses cleansed	..	..	3
Cowsheds cleansed	..	..	4
Bakehouses cleansed	..	..	16
Yards, Stables, Sties, etc., cleansed	..	..	23
Manure pits provided or cleansed	..	..	12
„ „ repaired	..	..	3

BYE-LAWS.

Notices under Nuisance Bye-laws complied with	..	..	8
„ „ Common Lodging House Bye-laws complied with	..	..	2
„ „ Slaughter-house Bye-laws complied with	..	..	6

The following articles of food have either been seized or have been given up for destruction by the owners or consignees as unfit for the food of man, viz. :—

Carcases of Beef and Offal ..	9	Conger Eels	11
Quarters of Beef	7	Lemon Soles .. cases	8
Carcases of Mutton and offal ..	7	„ „ .. stone	8
„ ditto (Colonial) ..	9	Skate	12
„ Pork	14	„ .. boxes	6
Legs of Mutton (Colonial) lbs.	216	Haddock .. stone	3
Pieces of Beef & Mutton		„ (dried) .. boxes	99
(Colonial) .. lbs.	432	Codling (dried) .. boxes	65
Pieces of Beef (Colonial) „	110	Filletted Dried Fish „	137
Pieces of Bacon .. „	148	Escalops .. „	1
Pigs' Plucks	24	Mackerel .. „	75
Set of Bullock's Offal ..	1	„ .. 11,605	
Ox Kidneys (Colonial) lbs.	164	„ (dried) .. boxes	11
Sheep's Kidneys (Col.) „	20	Plaice .. basket	1
Ox Tails (Colonial) .. „	76	Prawns .. tins	17
Ox Tongues (Colonial) ..	4	„ .. 1,800	
Ox Livers (Colonial) ..	39	Salmon	2
Sweetbreads (Colonial) boxes	4	„ .. tin	1
Tripe (Colonial) .. lbs.	170	Shrimps .. galls.	158
Tripe (Colonial) .. boxes	26	„ .. sacks	3
Sausages lbs.	60	Crabs	89
„ box	1	„ .. barrels	4
Pork Pie	1	Eggs .. boxes	5
Whiting cases	3	„ (preserved) .. lbs.	56
Mixed Fish „	3	Fowls	21
Cray Fish „	5	Ducks	20
Cod Fish stone	11	Grouse	4
„ box	1	Turkeys	56
Cods' Roes stone	5½	Rabbits	65
Dabs „	2½	„ (Colonial) ..	326
Bream	24	„ and Fruit .. box	1
„ boxes	4	Oranges boxes	2
Herrings „	26	„	100
„ cwt.	8	Damsons baskets	17
„ barrels	17	Pears boxes	26
Bloaters boxes	46	Apples cask	1
Kippers „	109	„ galls.	32
Hake	9	Greengages baskets	12
Sprats barrels	11	Water Cress „	1
„ (Smoked) .. box	1	Carrots bags	100
Smelts boxes	147	Potatoes bushels	2
Gurnet „	2		

It was only necessary to obtain nine Magistrates' Orders for condemnation during the year.

GENERAL INSPECTION OF THE BOROUGH.

DWELLING HOUSES.—During the year 7,178 dwelling-houses were examined and 11,085 re-inspections of properties under Notice took place, whilst works ordered to be carried out were in progress.

Included in the above were 1,072 house to house inspections, a smaller number than in previous years. The defects were not dealt with under the clauses in the Housing and Town Planning Act, but under the Public Health Act, 1875, and were chiefly in regard to dampness from defective roofs, rain-water spouting, and defective walls ; want of ventilation in dwelling-houses, drainage, the provision of flushing cisterns to water closets, cleanliness, defective paving, etc.

COMPLAINTS.—870 Complaints were made at the office and received attention.

SLAUGHTER-HOUSES.—4,545 visits were made to the various Slaughter-houses. At the end of the year there were 75 in actual regular use and occupation, including 10 provisional licences.

DAIRIES, COWSHEDS AND MILKSHOPS.—1,830 visits were made to the Dairies, Cowsheds and Milkshops. 223 applications for registration were made, including 10 as cowkeepers, compared with 276 last year, and I am pleased to report that the premises and the animals have been generally very well kept.

COMMON LODGING HOUSES.—During the year 541 visits have been made to the Common Lodging Houses. There are now only nine in occupation, one having been closed. The premises have been kept in a fairly cleanly state, and no action has been taken against any of the keepers.

WORKSHOPS.—Owing to the whole of the clerical staff of the Department having joined the Colours, Inspector Gray was relieved of his work under the Factory and Workshops Act and took over the clerical work of the office from May last, and the District Inspectors have visited Workshops and Bakehouses in their respective districts. 2,200 visits have been made by the Inspectors, and 103 visits were made by Miss Monk and 455 visits were made to outworkers' premises.

During the year Dr. Pearse, one of the Medical Inspectors of the Local Government Board, paid two visits to the town, and I accompanied him to a number of workshops and other places, where articles of food were being prepared for sale or sold to the troops in the garrison. Dr. Pearse made sugges-

tions for improvement in some of the premises, which were at once carried out by the occupiers under our supervision. The various places have since been regularly visited by the Inspectors, and in no case have we found anything of a suspicious nature being prepared for food.

BAKEHOUSES.—1,128 visits have been made to the different Bakehouses, which have been kept clean and regularly limewashed. 16 Notices were sent with respect to limewashing.

INFECTIOUS DISEASES.—2,906 visits were made to premises where infectious diseases have occurred. The usual particulars were obtained for the Medical Officer of Health and the houses were examined for sanitary defects.

DISINFECTION.—2,308 rooms have been disinfected after infectious diseases, and a large number of articles of clothing bedding, etc., have been disinfected in the steam disinfectors at Milton Hospital, as well as quantities of horse rugs sent in by the Military Authorities.

DRAINAGE.—3,170 old drains were tested or re-tested by the District Inspectors. Inspector Turner tested or re-tested 1,025 new drains and 874 sanitary fittings in connection with new buildings. He has also tested a number of sewers and drains relaid by the Borough Engineer's staff.

SALE OF FOOD AND DRUGS ACT.—During the year 937 samples were submitted to the Public Analyst under the provisions of the above Act. Of these 85, or 9 per cent., were found to be adulterated. Of the samples taken 549 were milks, 8 skim milk, 163 butter, and 47 drugs. 305 samples of milk were taken from vendors in the streets or at dairies, 142 were taken in course of delivery, and 2 were sent in by private persons. 29 of the milk samples purchased were found to be below the standard. Legal proceedings were taken in 18 cases, convictions were obtained in 12 of these, and 6 informations were dismissed ; in five of the latter the defence of a warranty was successfully established, and the other case was dismissed because the analysis of the third part which was sent to Somerset House, did not agree with the Borough Analyst's certificate, although it was returned as below the standard. In 10 cases the vendors were cautioned. Of the 142 milks taken on delivery, 104 were from milks sent by farmers, and of these 31 or 30 per cent. were found to be below the standard. Proceedings were taken in 24 cases and convictions obtained in 8 ; three were dismissed on the ground that the milk was sold as drawn from the cow. Three farmers received letters of caution.

Thirty-eight samples of milk were taken during delivery at public institutions and private houses. Of these, 8 were below the standard ; proceedings were taken in 4 cases and one conviction was obtained.

During September on six occasions visits were paid to the Mental Hospital, Milton, for the purpose of taking samples from the herd there. The results of the analysis showed that there was 3.33 per cent. of fat in the morning milk and 4.48 per cent. in the afternoon milk.

Two milk vendors were summoned for impeding the Inspector and were fined £2 in each case.

PROSECUTIONS AND FINES.

PUBLIC HEALTH ACT, 1875.

Under the Nuisance Clauses of the Act proceedings were taken in three cases, viz. :—

<i>Initials</i>	<i>Offence</i>	<i>Result</i>
H.B.	.. Non-compliance with Notice to abate Nuisance at 3 St. Catherine Street.	Ordered to abate nuisance in 7 days.
R.S.	.. Ditto in Merry Row ..	Ditto within 6 weeks.
W.W.	.. Ditto at 1-6 Pavilion Place ..	Ditto in 7 days and to pay 13/- Costs.
A.B.	.. Depositing for Sale at the Portsmouth Town Station 673 dried Codling, which were unfit for the food of man.	Fined 6d. for each fish, or a total of £16 16s. 6d.
J.B.	.. Depositing for Sale at the Fratton Station four quarters of Beef, which were diseased and unfit for the food of man.	Fined £3 each piece. Total £12.

FOOD AND DRUGS ACT.—Forty-eight informations were laid with respect to adulteration. Twenty-two convictions were obtained, and Fines and Costs amounting to £63 14s. 0d. were inflicted. Ten cases were dismissed, chiefly on warranty grounds, three were dismissed on payment of the costs, two were withdrawn on payment of costs, eight other cases were withdrawn, and three were adjourned *sine die*.

Two persons were summoned for refusing to serve and obstructing the Inspector, and each were fined £2.

Under the Margarine Act, one information was laid and the case was withdrawn, the defendant being fined £1 under the Food and Drugs Act.

I am, Gentlemen,

Your obedient servant,

FRED L. BELL,

Chief Inspector of Nuisances.

The Diseases of Animals Act, &c.

TO A. MEARNS FRASER, ESQ., M.D.,

Medical Officer of Health, Portsmouth.

SIR,

I beg most respectfully to present my Annual Report for the year ending December 31st, 1915.

INSPECTION OF CATTLE.—The following is a list of animals which have been imported into the Borough from all quarters during the year, viz.:—

(1) Cattle arriving at Town and Fratton Railway Stations, as follows:

Beasts	..	..	..	8,498
Sheep	..	..	..	22,400
Calves	..	..	..	4,538
Pigs	..	..	..	12,047
				<hr/> 47,483

(2) Cattle arriving by Horse Boats from the Isle of Wight:

Beasts	..	..	..	723
Sheep	..	..	..	1,756
Calves	..	..	..	1,068
Pigs	..	..	..	4,255
Yearlings	..	..	..	257
Horses	..	..	..	410
				<hr/> 8,469

(3) Cattle arriving from the Western Districts, re Cosham Station, for Portsmouth:

Beasts	..	..	..	1,659
Sheep	..	..	..	5,997
Calves	..	..	..	399
Pigs	..	..	..	465
				<hr/> 8,520

(4) Cattle arriving by Road from various markets, etc. :

Beasts	..	..	..	655
Sheep	..	..	..	8,339
Calves	..	..	..	3,366
Pigs	..	..	..	12
				<hr/>
				12,372
				<hr/>

The above is approximately the number that has arrived in the Borough during the year.

INSPECTION OF CATTLE TRUCKS, &c.—2,454 cattle trucks, 538 horse boxes, and 410 tow-boats have been inspected during the year. All of these were cleansed and lime-washed as required by the various orders made by the Board of Agriculture and Fisheries.

FOOT AND MOUTH DISEASE ORDER OF 1915.—In consequence of several outbreaks of the above disease occurring in different counties, the Board of Agriculture and Fisheries issued orders relating to the slaughter and movement of animals, by declaring such districts infected areas. These had my special attention, but no case has been detected or reported in the Borough during the year.

SWINE FEVER ORDER OF 1908.—During the year three outbreaks of Swine Fever occurred in the Borough. Two of these cases were traced to a farm at Hayling Island. The farmer was prosecuted for not reporting Swine Fever upon his premises. When his pigs were suffering from Swine Fever he took them to Cosham Market and some pig owners of this Borough bought them. In consequence of these outbreaks Form (B) was served upon twenty different pig owners, placing them under restriction for three months, by Order of the Board of Agriculture Inspectors. The number of animals affected by the outbreak was 681, of which 27 died, seven were killed by the Board's Veterinary Surgeon, and 143 fat pigs were licensed by the Board's Inspectors and myself to various Slaughterhouses. These had my supervision until they were dressed and passed fit for food. For the first time in this Borough the Board of Agriculture and Fisheries introduced the anti-Swine Fever Serum. Nearly the whole of the pigs at the Portsea Island Workhouse have been vaccinated against the disease, and it was reported by the Board's Officials to prove very satisfactory in the saving of pig life.

During the year I received from various districts no less than 2,585 licenses relating to the movement of fat pigs

into the Borough for slaughter, and 131 licenses were issued for store pigs. These had the supervision of Inspector Turner and myself until the time expired for isolation by the Order.

TUBERCULOSIS ORDER OF 1914.—This Order has been suspended during the War, but it has been necessary from a health point of view to examine all animals, as far as possible, arriving in the Borough from certain districts, as a great deal of trading has been done during the year in suspicious and emaciated animals. I have given special attention to these until they were slaughtered.

IMPORTATION OF DOGS ORDER OF 1914.—During the year I have received several Licenses and Memoranda from the Board of Agriculture and Fisheries, and the Customs Officials in H.M. Dockyard, notifying dogs arriving from foreign parts into this Borough. Two were performing dogs and licensed to places of amusement. These had Inspector Turner's supervision until they were licensed by the Board of Agriculture and Fisheries to other towns.

PARASITIC MANGE ORDER OF 1911.—This Order was suspended from the 6th day of August, 1914, with the exception of Article 7, which does not permit horses while suffering from Parasitic Mange to be exposed or come in contact with other horses, but on the 28th March the Order was enforced again.

During the year many complaints were made by the Police and owners of horses, and horses affected were dealt with until cured, except for one, which was so bad that the owner, by the advice of his Veterinary Surgeon, had it destroyed and the premises disinfected.

GLANDERS AND FARCY ORDER OF 1907.—During the year several horses were reported on suspicions of suffering from Glanders. Most of these were cart horses from the War Department, not suited for military purposes, but in no case was Glanders certified by the Veterinary Surgeon for the Borough.

RABIES ORDER OF 1897.—During the year several suspicious cases of Rabies have been reported. One dog reported by the Police as having bitten several people was shot. The Veterinary Surgeon made a post-mortem, but failed to find any trace of Rabies, and gave a certificate to that effect.

ANIMALS (TRANSIT AND GENERAL) ORDER OF 1912.—During the year no lame horses have been sent by rail from

this Borough to foreign countries, but a large number of Government horses have been entrained for various parts. These are generally under the care of a Government Veterinary Surgeon, and my duty in these cases consists only in seeing the railway trucks and horse boxes are cleansed in accordance with the Orders during transit.

A large number of Orders and Instructions sent to me through the Town Clerk by the Board of Agriculture and Fisheries, relating to animals, have had my attention, and have all been vigorously carried out during the year.

I am, Sir,

Your obedient servant,

G. W. MONKCOM.

Female Inspector's Report.

TO THE MEDICAL OFFICER OF HEALTH.

I beg to report on the Inspection during the year as follows :—

NOTIFICATION OF BIRTHS ACT.

Births notified	4,705
First visits paid	4,046
Subsequent visits	4,340

During the first months only six per cent. of the infants were found to be artificially fed.

EPIDEMIC DIARRHOEA.

Fatal cases amongst Infants ..	26
Under one year	21
Over one and under two years ..	5

Of those under one year 17 were artificially fed, and of the five over one year, but under two, three were weaned when a few weeks of age.

OPHTHALMIA NEONATORUM.

Cases reported	28
Visits paid	200

All these cases made a good recovery.

INFECTIOUS DISEASES.

Including cases of Measles 418 visits were paid.

MIDWIVES ACT.

Number of Midwives on Register	46
Number of Cases attended by Midwives	3100
Cases in which Medical assistance was sent for	260
Still-births	74
Inspections of Midwives and visits to Midwives' cases	726

There was no case of Puerperal Fever notified and no case of malpractice amongst midwives.

WORKROOMS AND OUT-WORKERS.

To those of the above where females were employed 359 visits were paid.

MARY MONK,

Female Inspector and Health Visitor.

The Public Analyst's Report.

THE CHEMICAL LABORATORY,
16 ARUNDEL STREET,
PORTSMOUTH.

To the Chairman and Members of the Health Committee.

GENTLEMEN,

I beg to submit my Report on the work conducted in the Public Analyst's Department during the year ending December 31st, 1915.

Owing to the fact that I have no Assistant, the number of samples examined is slightly less than during the previous twelve months, and there is again an increase in the total adulteration compared with the same period. It will be seen in the following Report that the percentage of detected adulteration is steadily increasing. This is a very serious matter, and can only be met by a more vigorous enforcement of the Food and Drugs Act.

In August 1915, the Council granted me leave of absence for the duration of the War in order that I might take a Commission in the 2/6th Hants Regiment, and since that time the work of the Department has been carried on by Dr. A. Angell, of Southampton.

I have to express my indebtedness to Inspector J. S. Hobbs for the extremely thorough and efficient manner in which he has at all times carried out his duties.

I am, Gentlemen,

Your obedient servant,

REGINALD P. PAGE,
Public Analyst.

REPORT OF THE PUBLIC ANALYST.

During the year ending December 31st, 1915, the number of samples examined was 1,019, which may be briefly summarised as follows :—

Food and Drug Samples	..	..	937
Waters	..	..	40
Miscellaneous	..	..	42
			1,019

The number of Samples taken in connection with the Sale of Food and Drugs Act is 937. This averages one sample to every 266 persons in the Borough, or a "Sample Rate" of 3.7 samples per 1,000 persons.

The last report published by the Local Government Board gives one sample per 333 persons in England and Wales, or a "Sample Rate" of three samples per 1,000 persons.

The number of samples examined, the number adulterated and the percentage of adulteration for each of the different classes of foods and drugs is given in the following table :—

TABLE A.

Nature of Sample	Number Examined	Number Genuine	Number Adulterated	Percentage of Adulteration
Milk	549	483	66	12·0
Skim Milk	8	7	1	12·5
Condensed Milk	3	3	..	..
Cream	5	2	3	60·0
Butter	163	158	5	3·0
Margarine	16	16	..	..
Cheese	16	16	..	..
Cream Cheese	1	1	..	..
Lard	11	11	..	..
Tea	4	4	..	..
Coffee	23	18	5	21·7
Coffee and Chicory	1	1	..	..
Cocoa	16	16	..	..
Pepper	8	8	..	..
Mustard	9	9	..	..
Ground Ginger	9	9	..	..
Jam	7	5	2	28·5
Flour	6	6	..	..
Corn Flour	5	5	..	..
Arrowroot	6	6	..	..
Rice	12	12	..	..
Pearl Barley	4	4	..	..
Baking Powder	3	2	1	33·3
Sausages	1	1	..	..
Beer	1	1	..	..
Honey	3	3	..	..
Camphorated Oil	7	7	..	..
Olive Oil	4	4	..	..
Ammoniated Tincture of Quinine	8	6	2	25·0
Tincture of Iodine	3	3	..	..
Beeswax	5	5	..	..
Milk of Sulphur	3	3	..	..
Boric Acid Ointment	7	7	..	..
Mercury Ointment	1	1	..	..
Iodiform Ointment	2	2	..	..
Seidlitz Powders	6	6	..	..
Rectified Spirit	1	1	..	..
	937	852	85	9·0

From the figures given in the foregoing Table it will be seen that 9·0 per cent. of the samples examined were found to be “not genuine.” Comparing this figure with that for the previous twelve months (6·4 per cent.) a marked increase is shown in the percentage of detected adulteration.

The corresponding figure for England and Wales is 8·2 per cent., and for London 9·1 per cent.

TABLE B.
ADULTERATED SAMPLES.

No.	Nature of Sample	Nature of Adulteration	Result—Fines, &c.
8	Milk	7% deficient in fat ..	Dismissed on paying Costs 6/6.
29	Do.	4% of added water ..	Fined 36/- and 4/- Costs.
67	Ammoniated Tinc. of Quinine	10% deficient in Quinine Sulph. ..	Test sample.
74	Milk	4% deficient in fat	Cautioned by M.O.H.
96	Amn. Tincture of Quinine	10% deficient in Quinine Sulph. ..	.. ..
99	Milk	5.3% of added water ..	Case dismissed (Warranty).
135	Do.	3% deficient in fat and 2% of added water	Withdrawn on paying costs 2/6
136	Do.	7% of added water and 3% deficient in fat .. ..	.. ..
143	Do.	5% of added water	Case dismissed (Warranty).
161	Coffee	60% of Chicory	Test Sample.
173	Milk	2% of added water	Cautioned by M.O.H.
178	Do.	2.5% of added water .. ..	.. ..
193	Do.	3% deficient in fat .. ..	.. ..
195	Do.	2.5% of added water .. ..	.. ..
205	Do.	5% deficient in fat	Case withdrawn (Farmer's).
206	Do.	3%	Not proceeded with (Farmer's).
207	Do.	7%	Case withdrawn (Farmer's).
210	Do.	17%	Case dismissed (Farmer's).
213	Do.	4%	Case withdrawn (Farmer's).
222	Coffee	50% of Chicory	Test Sample.
236	Do.	50% of Chicory	Fined 20/-.
247	Milk	3% deficient in fat	Not proceeded with.
251	Do.	2%	Not proceeded with.
254	Do.	4%	Case dismissed.
284	Do.	8%	Fined 30/-.
285	Do.	6.7% of added water	Fined 20/-.
286	Do.	4%	Not proceeded with.
314	Raspberry Jam ..	1.4 grs. of Salicylic Acid per lb. ..	Test Sample.
322	Do.	1.4	Do.
334	Milk	4% of added water	Case dismissed (Warranty).
335	Do.	37% deficient in fat	Fined £3, inclusive.
336	Do.	10% deficient in fat and 2% of added water	Fined 40/-.
337	Do.	2% of added water	Not proceeded with.
345	Do.	5% deficient in fat	Fined 30/-.
353	Butter	2.87% excess of moisture	Test Sample.
362	Milk	17% deficient in fat	Fined 30/-.
368	Do.	40%	Fined 80/-.
401	Do.	7%	Fined 20/-.
412	Do.	20%	Case dismissed (Warranty).
435	Do.	7%	Case dismissed.
438	Skim Milk	10% of added water	Fined 40/-.
444	Milk	10% deficient in fat	Fined 40/-.
447	Do.	8%	Not proceeded with.
449	Do.	21%	Fined 80/-.
466	Do.	6%	Case dismissed.
468	Do.	35%	Fined 40/-.
469	Do.	4%	Cautioned by M.O.H.
471	Butter	Consisted of Margarine	Private sample sent in.
477	Milk	10% deficient in fat	Not proceeded with.
479	Do.	8% .. ..	.. ..
480	Do.	5% .. ..	.. ..
481	Do.	25%	Fined £10.
494	Coffee	60% of Chicory	Test Sample.
497	Cream	0.27% of Boric Acid	Cautioned under Milk and Cream Regulations.
498	Do.	0.15% .. ..	.. ..
499	Do.	0.22 .. ..	.. ..
544	Baking Powder ..	66.7% deficient in available Carbon Dioxide	Test Sample.

No.	Nature of Sample		Nature of Adulteration		Results—Fines, &c.
556	Milk	.. ..	3% of added water	.. ..	Not proceeded with.
337	Do.	.. ..	5% .. ..	.. ..	.. ..
558	Do.	.. ..	8% .. ..	.. ..	Case dismissed (Farmer's Milk).
559	Do.	.. ..	2.5% .. ..	.. ..	Not proceeded with.
560	Do.	.. ..	13.3% .. ..	.. ..	Fined £5.
561	Do.	.. ..	10% .. ..	.. ..	Not proceeded with.
576	Do.	.. ..	6% .. ..	.. ..	Case dismissed (Warranty).
604	Do.	.. ..	9% deficient in fat	.. ..	Cautioned by Town Clerk
615	Do.	.. ..	6.6% .. ..	.. ..	.. ..
626	Do.	.. ..	6% .. ..	.. ..	.. ..
668	Do.	.. ..	18.3% .. ..	.. ..	Case dismissed. Third part sent to Somerset House. Returned not less than 6% deficient in fat.
669	Do.	.. ..	8.3% deficient in fat	.. ..	Fined 20/-.
671	Do.	.. ..	6.6% deficient in fat	.. ..	Cautioned by M.O.H.
680	Do.	.. ..	25% of added water	.. ..	Test Sample.
696	Do.	.. ..	15% deficient in fat	.. ..	Fined 21/-.
704	Do.	.. ..	28.3% .. ..	.. ..	Private Sample.
709	Do.	.. ..	16.6% .. ..	.. ..	Fined £5.
710	Do.	.. ..	8.3% and 1.7% added water	.. ..	Not proceeded with after previous case.
717	Do.	.. ..	3.3% deficient in fat	.. ..	Cautioned by M.O.H.
723	Butter	.. ..	Consisted of Margarine	.. ..	Test Sample.
733	Milk	.. ..	1.65% added water and contained traces of Formalin..	.. ..	Cautioned by M.O.H.
745	Butter	.. ..	Consisted of Margarine	.. ..	Fined 20/-.
775	Coffee	.. ..	40% of Chicory	.. ..	Test Sample.
786	Milk	.. ..	13.3% deficient in fat	.. ..	Fined £5.
807	Do.	.. ..	18.3% and 9% of added water	.. ..	Fined 10/6.
815	Do.	.. ..	56.6% deficient in fat	.. ..	Fined £5.
884	Butter	.. ..	Consisted of Margarine	.. ..	Test Sample.
892	Milk	.. ..	3.6% of added water	.. ..	Cautioned by M.O.H.

Total Fines, including Costs, amounted to £62 13s. 0d.

Two milk vendors were summoned for impeding and obstructing the Inspector from taking samples of milk, and in each case a fine of 40/- was imposed. Several milk vendors were personally cautioned by the Inspector for not having their names and addresses on receptacles from which milk was served.

TABLE C.

Showing the number of samples analysed and the number found to be adulterated in Portsmouth during the last five years.

	Year	Samples Examined	Number Adulterated	Percentage Adulterated
PORTSMOUTH	1911	1123	54	4.8
Do.	1912	1140	52	4.5
Do.	1913	1072	27	2.5
Do.	1914	1099	70	6.4
Do.	1915	937	85	9.0
ENGLAND AND WALES	1911	103221	9009	8.7
Do. do.	1912	108174	9086	8.4
Do. do.	1913	108157	8860	8.2

MILK.

The following Table gives the statistics of the Milk adulteration during the last five years :—

TABLE D.

	Year	Number Examined	Number Adulterated	Percentage Adulterated
PORTSMOUTH	1911	544	34	6·2
Do.	1912	480	27	5·6
Do.	1913	466	16	3·4
Do.	1914	530	49	9·2
Do.	1915	549	66	12·0
ENGLAND AND WALES ..	1913	52539	5582	10·6

On the last page of this Report will be found a curve showing the adulteration of the Portsmouth Milk Supply, in comparison with similar curves drawn for England and Wales and for London.

Each sample of milk is submitted to as complete an examination as possible, in order to ascertain the actual quality of the milk supplied in the town, and the following table, which includes all milks, both genuine and adulterated, gives the average percentage of Fat and of Non-fatty Solids for each month of the year under review :—

TABLE E.

	Fat	Solids not Fat	Total Solids
JANUARY	3·32	8·80	12·12
FEBRUARY	3·36	8·73	12·09
MARCH	3·30	8·75	12·05
APRIL	3·29	8·66	11·95
MAY	3·34	8·77	12·11
JUNE	3·32	8·76	12·08
JULY	3·44	8·58	12·02
AUGUST	3·67	8·71	12·38
SEPTEMBER	3·39	8·71	12·10
OCTOBER	3·32	8·90	12·22
NOVEMBER	3·33	8·89	12·22
DECEMBER	3·38	8·74	12·12
Annual Mean ..	3·37	8·75	12·12

During the year there have been 104 samples of milk taken at the Railway Stations, and of these 31 were found to be below the standard required. This means that one-third

of the samples taken at the stations were found to be "not genuine," and shows the necessity of constantly sampling the milk coming into the town.

Proceedings were instituted in 24 cases, convictions being obtained in 8 cases. Two cases were withdrawn on payment of Costs, the farmer having previously obtained a conviction against his cowman for watering the milk. Three cases were dismissed, the Magistrates apparently being satisfied that the milk was sold "as drawn from the cow," and the other cases were not proceeded with after a conviction was recorded against the farmer.

The mean composition of the farmers' milk was 3.25 per cent. of fat and 8.65 per cent. of non-fatty solids.

Thirty-seven samples of milk were obtained from Kingston Workhouse, Royal Marine Artillery Barracks, and the various Hospitals in the Borough. Three of these samples were returned as adulterated, and four samples were returned as being below the contract standard of 3.5 per cent. milk fat.

The average composition of these milks was 3.7 per cent. of milk fat and 8.75 per cent. non-fatty solids.

BUTTER.

163 samples of Butter were examined during the year, and of these 5 or 3.06 per cent. were found to be not genuine.

Of the 5 adulterated samples, one contained an excess of moisture, one was a mixture containing 43 per cent. of foreign fat, and three consisted wholly of margarine.

The following table gives the number of samples examined, the number adulterated, and the percentage of adulteration during the last five years.

	Year	Number Examined	Number Adulterated	Percentage Adulterated
PORTSMOUTH	1911	227	4	1.7
Do.	1912	312	25	4.8
Do.	1913	303	4	1.3
Do.	1914	249	4	1.6
Do.	1915	163	5	3.06
ENGLAND AND WALES ..	1913	21932	1113	5.2

Each sample of Butter is examined for the presence of Preservatives, and in the following table is given the percentage of samples in which Boracic Compounds have been found during the last three years.

	Year	Number Examined	Number containing Boracic Compounds	Percentage containing Boracic Compounds
PORTSMOUTH ..	1913	303	244	80·6
Do. ..	1914	249	208	83·5
Do. ..	1915	163	110	60·9

GROCERIES.

Twenty-three samples of Coffee were taken, and of these five were found to contain Chicory. A conviction was obtained in one case.

One sample of Baking Powder was found to be deficient in Available Carbon Dioxide, and the vendor warned.

JAM.

Seven samples of Jam were examined, two of which contained traces of Salicylic Acid, but since the quantity of this substance detected was too small to exercise any preservative action on the whole sample, it is extremely likely that the paper laid upon the surface of the jam had been dipped in a solution of Salicylic Acid to prevent the growth of moulds upon the surface.

DRUGS.

Ammoniated Tincture of Quinine.—The two adulterated samples of this substance were found to be slightly deficient in Quinine Sulphate—the active principle of the Tincture. The vendor was warned in both instances.

MISCELLANEOUS SAMPLES.

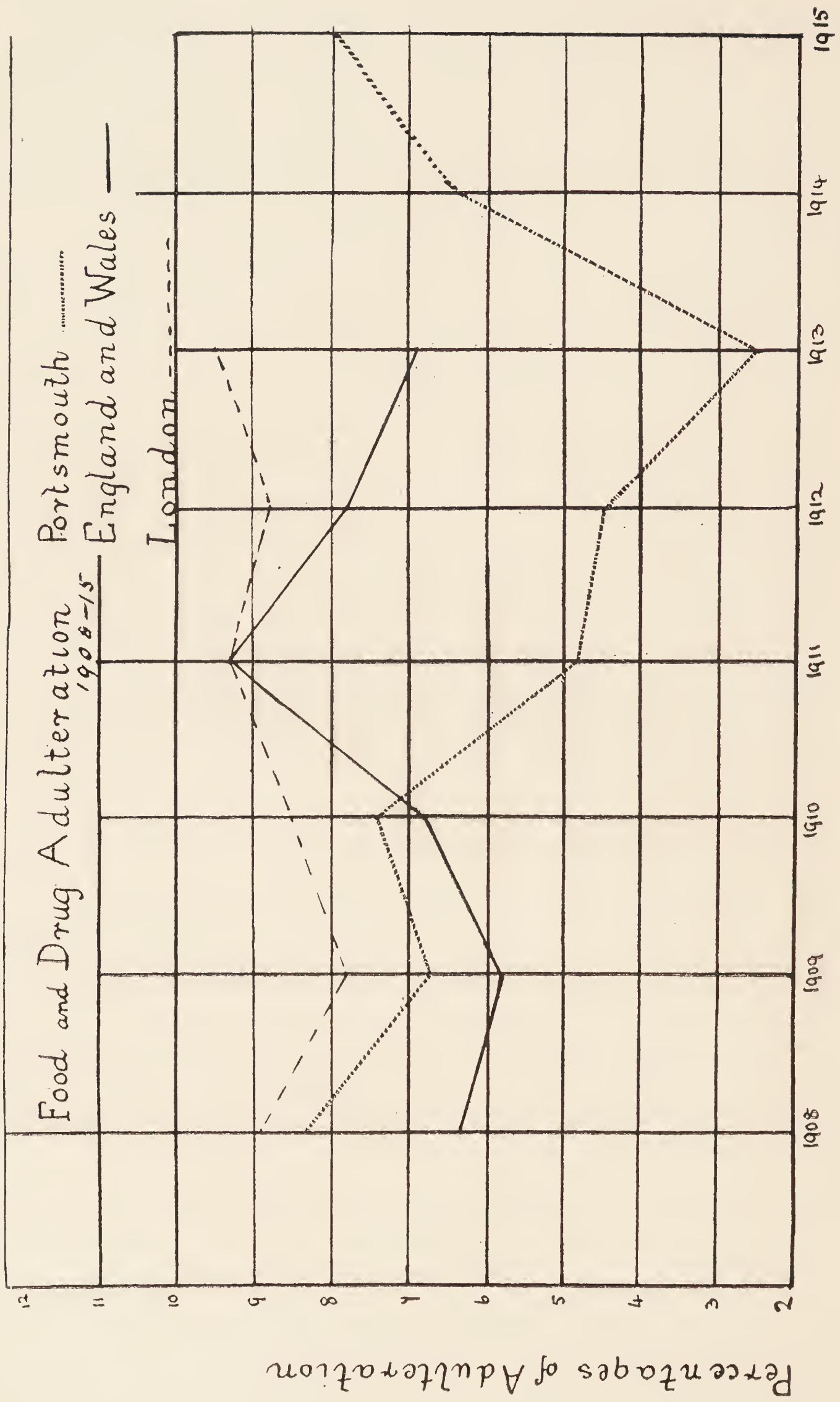
In addition to the samples of Foods and Drugs examined, analyses were made during the year of various substances on behalf of different Committees, as follows :—

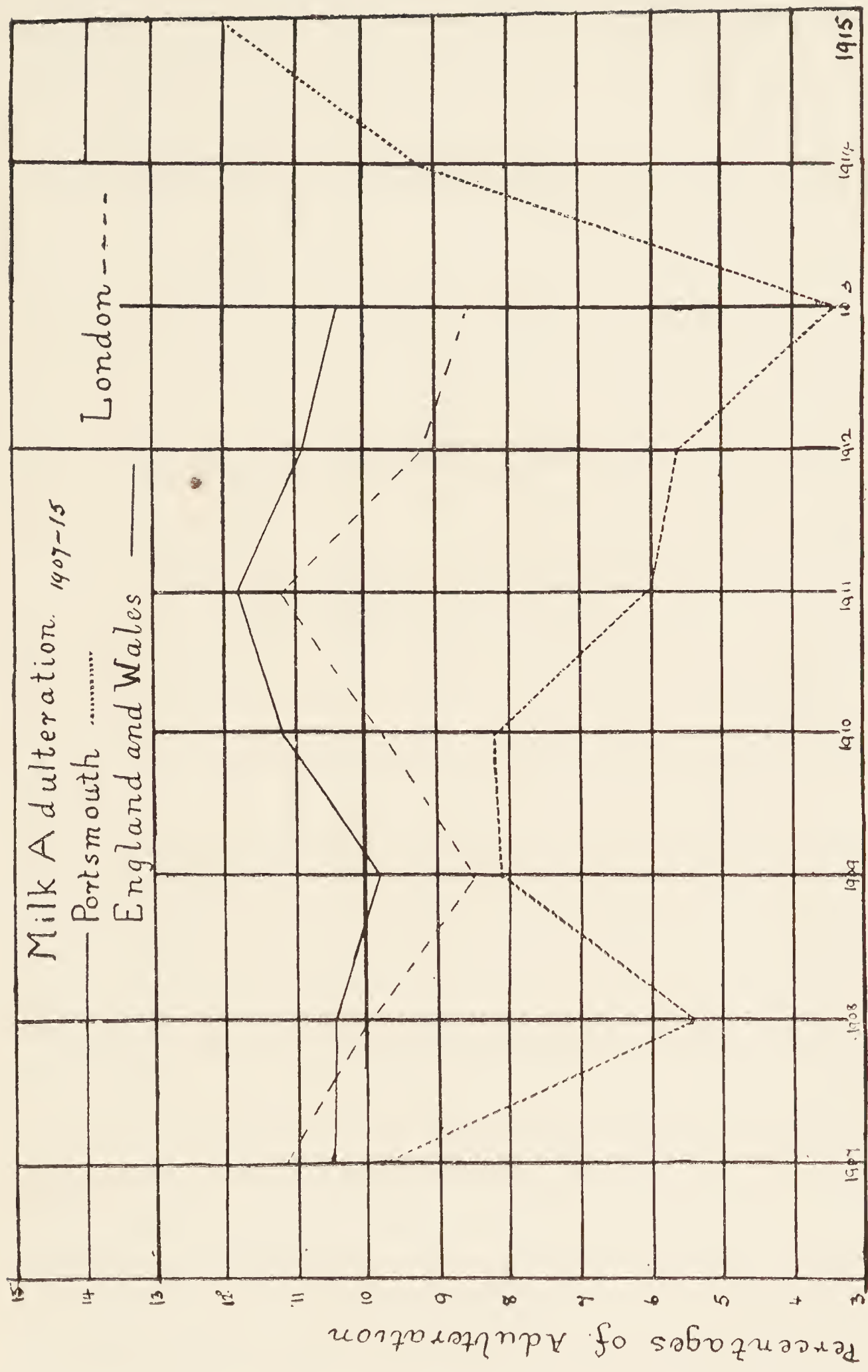
Paint	12
Turpentine	10
Linseed Oil	9
Soap	2
Varnish	2
Russian Petroleum	2
Patent Drier	1
Lard Oil	1
Colza Oil	1
Cement	1
Fowl (dead)	1
	— 42

The 40 samples of Water analysed during the year were derived mainly from the Town Supply and from Baffins Tip.

REGINALD P. PAGE,

Public Analyst.







INDEX.

	<i>Page</i>
Acreeage	13
Analyst's Report	105-115
Appendix (I, II, III, IV)	86, 87, 88, 89
Bacteriology	64
Births	9
Birth-rate	15
Cancer	43
Cerebro-Spinal Fever	35-43
Deaths, total	9
„ different causes of	16-24
„ quarterly	11
„ children under 1 year	63
Death-rate for 10 years	15
Diarrhoea	64
Diphtheria	29-31
Diseases of Animals Act	100-103
Disinfectant Plant Station	73
Dispensary, Tuberculosis	44, 45, 48-52
Dogs Order, Importation of	102
Drainage Defects	94
Enteric Fever	31-34
Factory and Workshop Act	74-76
Female Inspector's Report	104
Food and Drugs Act	98
Food, unsound or destroyed	96
General Inspection of the Borough	97
General Sanitary Supervision	68-72
Health Committee	3
Housing	72-73
Infantile Mortality	58
Infectious Diseases	87
„ „ weekly numbers	55
„ „ Notified, ages of patients	87
„ „ Hospital, list of cases admitted from 1883	93
Inhabited Houses	13
Inspection of Cattle	100
„ Cattle Trucks, etc.	101
Inspector of Nuisances Report	94-99
Introductory Report	7
Langstone Hospital	46, 48, 52
Lung Diseases, Number and Rate of	23
Marriages	9
Maternity and Child Welfare	58-63
Measles	35
Meteorological and Diseases Chart	Inset at Front
Meteorological Observations	77-85
Milton Hospital	91-93
„ Medical Superintendent's Report	91
Midwives, Roll of	65, 66
Municipal Disinfectant Station	73
Municipal Tuberculosis Dispensary	44, 45, 48-52
Notification of Births Act	104
Ophthalmia neonatorum	59
Parasitic Mange	102
Poliomyelitis	43
Population	9-12
„ at Census, 1911	13
Port Sanitary Authority	90
Prosecutions	99
Rainfall	78, 80
Sanitary Defects	95
Scarlet Fever	28-29
Slaughterhouses, Cowsheds, Bakehouses, etc.	97
Small-pox	25
Staff of Health Department	4, 5
Statistics	9-12
Summary of Deaths	22
Summary of Statistics	8
Swine Fever	101
Tuberculosis	43-54
Vaccination Returns	26, 27
Venereal Diseases	56-58
Water Supply	68
„ Analysis of	67
Workshops, Nuisances in respect of	76
Zymotic Death-rate	24
Zymotic Diseases (1861-1915) table	24

